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IN THE

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1968.

No. 424

DRESSER INDUSTRIES, INC., A CORPORATION,
Petitioner,

vs.

HERAEUS ENGELHARD VACUUM, INC.,
A CORPORATION,
Respondent.

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE THIRD CIRCUIT.

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A CORPORATION,
Respondent.

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE THIRD CIRCUIT.

Dresser Industries, Inc. prays that a writ of certiorari issue to review the judgment of the United States Court of Appeals for the Third Circuit entered in the above entitled cause on May 24, 1968.

OPINIONS BELOW

The opinions raising the questions upon which certiorari is sought are the opinions of the Court of Appeals, printed in Appendix B hereto, *infra,* p. B-1, reported unofficially at 158 U.S.P.Q. 65 (3d Cir. 1968), and the District Court, printed in Appendix A hereto, *infra,* p. A-1, reported at 267 F. Supp. 963 (W.D. Pa. 1967).

JURISDICTION

The jurisdiction of the Third Circuit Court of Appeals and of the District Court was based on the Lanham (Federal Trademarks) Act (15 U.S.C. §§ 1051-1127) and 28 U.S.C. § 1338(b). The judgment of the Court of Appeals was entered on May 24, 1968 (Appendix B, *infra*, p. B-1). The jurisdiction of this Court is invoked under 28 U.S.C. § 1254(1).

QUESTIONS PRESENTED

1. Is this Court's decision in *Singer Mfg. Co.* v. *June Mfg. Co.*, 163 U.S. 169 (1896), that a trademark which becomes a generic name "during the life of a monopoly created by a patent" passes to the public when the patent expires, repudiated by the decision below that a failure of proof of genericness during the patent term "does not affect the application of the rule of the Singer decision"?

2. Does a federally registered trademark become presumptively generic as a matter of law under *Singer* upon expiration of an improvement patent where the public has the right to make virtually the same product a decade before the patent issues, where there is no evidence of genericness during the patent term, where the patent expires over eighty years before the alleged trademark infringement begins, and where numerous related patented and unpatented products are sold under the mark?

3. Do the patent laws supersede the Lanham Act and create a greater public right to use a trademark generically for a once-patented product than for a product which has never been patented?

4. Alternatively, because of the unanimous modern and better-reasoned view that an expired patent on a trade-

marked product has no bearing whatever on the question of whether the mark has become generic, should this Court overrule the *Singer* patent-expired genericness presumption?

5. Does the Sherman Act "relevant market" test of identical product competition rejected by a majority of this Court in the "cellophane" case apply under the Lanham Act in arbitrarily defining "relevant purchasing public," so as to exclude (a) more than half the actual buyers of competing products sold under the mark and (b) all advertising of and use of the mark on numerous products related to the identical competing product?

6. Under the Lanham Act may a registered, multi-product trademark be a generic term as to one product and a valid trademark as to other, related products?

FEDERAL STATUTES INVOLVED

The Statutes involved are Sections 1114(1), 1115(a), and 1125(a) of the Lanham Act (15 U.S.C. §§ 1114(1), 1115(a) and 1125(a)).

These provisions are set forth in Appendix D, *infra*.

STATEMENT

Petitioner

Petitioner, Dresser Industries, Inc., a diversified business having its principal offices in Dallas, Texas, filed suit against Respondent, Heraeus Engelhard Vacuum, Inc., in the District Court at Pittsburgh, Pennsylvania in 1964. Petitioner[1] markets over 300 different types, models and

[1] "Petitioner" includes predecessors in interest.

sizes of air and gas handling pumps and accessories under the house trademarks ROOTS and ROOTS-CONNERSVILLE through its Roots-Connersville Division of Connersville, Indiana. Petitioner's ROOTS pumps of various designs range in price from $95 to $20,000 or more, and range from football to automobile size. The trademark ROOTS has been used by petitioner since 1859 and has been federally registered to petitioner since 1922.

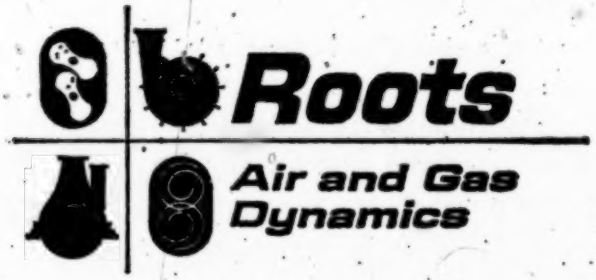
Since the beginning of its business in 1859, Petitioner has at all times marketed numerous types of pumps, blowers, valves, meters, gauges, generators and other products under the trademarks ROOTS or ROOTS-CONNERSVILLE. Since 1949 Petitioner's major products have been screw pumps, centrifugal pumps, lobe pumps and lobe gas meters. Screw pumps differ from lobe pumps and meters in design, but all operate on the rotary positive displacement principle. Centrifugal pumps, by contrast, operate on the aerodynamic principle. Petitioner has obtained eighty-eight patents spanning the period from 1860 to the date of trial and covering 27 different products, such as pumps, casings, meters, governors, valves, forges, washing machines, butter churns, dust separators, and drive shaft controls.

Lobe pumps, which have limitless variations in lobe design, have been known since at least 1630. The earliest United States lobe pump patent, involving figure 8 shaped lobes, issued in 1835 to one D. M. Walker and expired in 1849. It claimed an improvement over a previously invented pump.

Petitioner's first lobe pump patent, granted in 1860 and expired in 1874, covered an improvement in the pump disclosed in the 1835 patent. This patent (No. 30,157, later reissued as Re. No. 2369 in 1866), which expressly men-

tioned the 1835 patent, modified the 1835 figure 8 lobe design and the pump casing to reduce air leakage when the lobes rotated. The public has been free to manufacture figure 8 lobe pumps, with or without the improved lobe design covered by Petitioner's 1860 patent, for almost a century. At the time of trial, lobe pump competition was vigorous, with at least six major companies competing in the field.

For over a century Petitioner has associated the ROOTS or ROOTS-CONNERSVILLE trademarks, or both, with its entire range of products, and has engaged in substantial multi-product advertising under ROOTS. In furthering the public association of ROOTS with all its products, Petitioner has also employed a logo tying the mark to representations of its lobe, centrifugal and screw pump lines:



ROOTS and related marks are used by Petitioner throughout the operation of the Roots-Connersville Division, including on the products (by casting or on nameplates), in trade magazines, catalogs and other literature, in industrial directories, on signs, and on thousands of cartons, labels, stationery pieces, invoices and other business forms. For the 90-year period ending in 1949, Petitioner's sales of all its products exceeded $100,000,000. From 1950 to 1965 sales also exceeded $100,000,000. In the ten years prior to trial, Petitioner expended $1,084,000 in advertising ROOTS products. The 1922 federal trademark

registration for ROOTS was augmented by further registrations for ROOTS-CONNERSVILLE in 1955, 1956 and 1958, and for ROOTS in 1961, covering various products.

Petitioner's ROOTS products are sold to a broad segment of the public; any individual or business in need of air blowing or vacuum equipment. Roughly 60-70% of Petitioner's sales cover pumps priced from $95 to $1,000, and 80-90% cover pumps priced under $5,000.

Approximately half the buyers have no technical education or engineering background. For example, ROOTS lobe pumps have been sold to calliope operators, a two-man tropical fish business, a maker of toy balloons, neon sign shops, and dry cleaning plants. Typical orders from this group involve lower priced pumps, and are generally by telephone but occasionally by post card, letter and purchase order. There is usually no competitive bidding and, because of their lack of technical training, these purchasers are assisted by Petitioner's trained sales engineers. Among the non-technically trained purchasers are purchasing agents for corporate purchasers. They may shop the market for pumps or, if the item is large and expensive, they may solicit bids from competing suppliers.

By contrast, the other half of the purchasers of ROOTS products are engineers or others with technical training. These may be affiliated with industrial firms, governmental agencies, and colleges and universities using or dealing in pumps. All of Petitioner's major products (centrifugal, lobe and screw pumps) are offered to this market under the ROOTS trademark for both vacuum and positive pressure service in numerous applications, and some customers purchase Petitioner's entire pump line.

Respondent

W. C. Heraeus, GmbH, of Hanau, Germany is also in the air and gas handling field, dealing mainly in vacuum installations and equipment. It sold this equipment in the United States from 1955 and 1963, and during this period advertised figure 8 lobe pumps as ". . . the ROOTS pump", "High Speed Roots pumps" and "ROOTS HIGH-VACUUM PUMPS".

In 1958, while Heraeus was advertising "the ROOTS pump" in the United States it applied in Germany to register ROOTS PUMP as its own trademark, claiming that it had created the mark. It also challenged other German companies, claiming trademark rights in ROOTS PUMP, asserting that it was not a generic term, and arguing that it was not necessary to keep the designation free for public use.

In 1959 Petitioner protested the use of its registered ROOTS trademark by the Heraeus United States distributor, which terminated the use of the mark stating that ". . . no new material will be sent out using any reference to the Roots trademark". Heraeus did not repudiate or disavow the recognition of Petitioner's rights by its distributor.

In 1963 Heraeus organized Respondent Heraeus Engelhard Vacuum, Inc., as its United States subsidiary and marketing outlet, and the subsidiary resumed the parent's advertising use of ROOTS. Both Respondent's lobe pumps (ranging from $1,300 upwards) and Petitioner's screw, centrifugal and lobe pumps were marketed under ROOTS to and through the same purchasing public, including purchasing agents, in the same industries. Screw and centrifugal pumps are often interchangeable with lobe pumps, all of them pushing and pulling air simultaneously.

Upon being challenged by Petitioner, Respondent claimed that ROOTS was a generic term and that it would not cease its use. The present litigation ensued.

The Genericness Issue

Twenty-eight individuals familiar with the purchasing of air and gas handling equipment in the steel, plastics, food, flour, sanitation and other industries testified that to them ROOTS signified Petitioner. Respondent stipulated at trial that to corporate purchasing agents ROOTS signified Petitioner. Dean Harold E. Hoelscher, Dean of the University of Pittsburgh School of Engineering and Professor of Chemical Engineering, and Dr. Richard J. Grosh, Associate Dean of Engineering of the Purdue School of Engineering and Director of Industrial Development for the Purdue Research Foundation, also testified that ROOTS was a recognized trademark of Petitioner and was not a generic term.

Respondent introduced no testimony of members of the purchasing public, but relied solely on Dr. Ascher H. Shapiro, Head of the Department of Mechanical Engineering of Massachusetts Institute of Technology. He testified that ROOTS was a generic term in association with a lobe pump.

REASONS FOR GRANTING THE WRIT

1. The Court of Appeals has decided a question of federal trademark law in direct conflict with the applicable decision of this Court, *Singer Mfg. Co.* v. *June Mfg. Co.*, 163 U.S. 169 (1896), and with decisions of other Courts of Appeals, by applying *Singer* absent genericness proof during the patent term. All other reported federal court decisions on point have refused to apply *Singer* under these circumstances.

2. The Court of Appeals decision also raises an important question of federal trademark law which has not been, but should be, settled by this Court under modern conditions: Should the patent-expired genericness aspect of *Singer* be overruled?

3. The Court of Appeals decision raises a further important question of federal trademark law which has not been, but should be settled by this Court: Whether a trademark can to the same buyers simultaneously be a valid trademark for certain products and a generic term as to another related product.

4. The Court of Appeals decision raises yet a further important question of federal trademark law which has not been but should now be settled by this Court: Does the correct genericness/confusion test encompass as the "relevant purchasing public" all buyers of all products sold under the mark, instead of only those persons who buy the single product with respect to which defendant has been alleged to infringe.

ARGUMENT

1. The Court of Appeals has held Petitioner's century-old trademark ROOTS, a trademark of incalculable value, generic under *Singer Mfg. Co.* v. *June Mfg. Co.*, 163 U.S. 169 (1896), primarily because one of Petitioner's products was covered by an improvement patent which expired over ninety years before trial. Both that court and the District Court said that the mark was generic in fact, yet they mentioned *Singer* some nineteen times and expressly applied it as a doctrine of law. The District Court found that the 1860 patent "disclosed" the lobe pump engineering principle (it was actually disclosed prior to the 1835 patent) and found *Singer* controlling (A-21):

> "The word Roots in this context is incapable, under the Singer doctrine and under statutory law [the Court never indicated *what* statutory law], of registration as a trademark. This being so, there is no basis for plaintiff's action . . ." (Emphasis added).

The Court of Appeals agreed: "We conclude that the District Court did not misapply the Singer decision in this case." (B-13). Thus, legal, not factual, genericness was derived from the expired patent without more.

Even the courts below seemed to realize that there is no tenable legal basis for the facile rule that a trademark becomes generic when it is used on a patented product. Yet, they nevertheless applied *Singer* and, indeed, extended it far beyond the point where the courts unanimously agree it may not be carried.

In the first place the rule of *Singer*, as stated by this Court, is very narrow (163 U.S. at 199):

> "But where *during the life of a monopoly created by a patent,* a name, whether it be arbitrary or be that

> of the inventor, has become by his consent, either express or tacit, the identifying and generic name of the thing patented, the name passed to the public with the cessation of the monopoly which the patent created (emphasis added) . . ."

A patent owner may not enjoy trademark rights in the name by which the public came to know the patented product and thus retain ". . . the real fruits of the monopoly when that monopoly had passed away." (163 U.S. at 181). It is critical that genericness exist during the lifetime of the patent, in this case 1860-1874. Obviously if the mark does not become generic during the patent term there can be no trademark extension of the patent monopoly.

The requirement of genericness *during the patent term* has heretofore been recognized uniformly by all federal courts faced with the question. *Hughes* v. *Alfred H. Smith Co.*, 209 Fed. 37, 39 (2d Cir. 1913); *Prest-O-Lite Co.* v. *Davis*, 215 Fed. 349, 351 (6th Cir. 1914); *President Suspender Co.* v. *MacWilliam*, 238 Fed. 159, 163 (2d Cir.), *cert. denied*, 243 U.S. 636 (1916); *Ross-Whitney Corp.* v. *Smith, Kline & French Laboratories*, 207 F.2d 190 (9th Cir. 1953); *Hazeltine Corp.* v. *United States*, 170 F. Supp. 615 (Ct. Cl. 1959). Without such proof, the expired patent is not even germane.

Now, however, the Court of Appeals has expressly repudiated the basic requirement (B-10, 11):

> ". . . the narrow construction which the plaintiff seeks to place upon the rule laid down in the Singer decision cannot be accepted. . . . [W]e do not read the Singer decision to hold that only because the Singer name had become generic before the expiration of the term of the patent did the name pass into the public domain.
>
> • • •

> *Accordingly, we conclude that whether 'Roots' became a generic designation during the term of the patent or thereafter does not affect the application of the rule of the Singer decision to the facts of this case.* (emphasis added)"

The Court was led to this irreconcilable conflict with *Singer* because the record is bereft of any evidence of genericness from 1860-1874. In fact, the *only* mention the District Court made of this period was that in 1867 and 1873 Petitioner's products had earned awards for excellence (A-5).

The absurdity of ignoring the clear requirement could not be clearer than here, where even during the patent term Petitioner had no lobe pump monopoly. In 1849, when the 1835 patent (not mentioned by either court herein) expired, the public had the right to make a figure 8 lobe pump, and in 1874 it had the right to make the same lobe pump covered by Petitioner's 1860 patent. Did the public do so? The Court of Appeals answered this question: "At least half a dozen major companies manufacture and sell this type pump." (B-2).

Through direct conflict with the *Singer* doctrine a long-forgotten improvement patent has been catapulted over ninety years to work injustice and injury. Only review by this Court can cure this manifestly incorrect and conflicting holding.

2. The Court of Appeals application of *Singer* is also in direct conflict with the decisions holding that the doctrine is inapplicable where the trademark is applied to an extensive line of products. The rule was stated succinctly by the *Telechron* District Court in holding a multi-product trademark not generic:

> "The Singer doctrine has never been applied where the mark is used in connection with an entire line of

> products, such as here, for a generic name can only be a name of a particular article. *An arbitrary term applied to a whole line of products cannot be generic.* This distinction has been noted by an expert specialist in the profession. Mr. Nims has written: '*A name used on different articles made by the same concern cannot be the generic name for one of these articles, even though that one article once was patented.*'" (emphasis added).

Telechron, Inc. v. *Telicon Corp.*, 97 F. Supp. 131 (D. Del. 1951), *aff'd*, 198 F.2d 903 (3rd Cir. 1952) (now apparently overruled *sub silentio*).

The same view of *Singer* was followed by the Sixth Circuit Court of Appeals in *Enders Razor Co.* v. *Christy Co.*, 85 F.2d 195, 197-98 (1936). Defendant claimed that the trademark KEEN KUTTER fell into the public domain as generic for a type of razor when the razor patents expired. The Court of Appeals reversed a genericness holding because the trademark KEEN KUTTER was applied to an extensive line of cutlery products, including knives, saws, hatchets, and various cutting tools, and that the same advertising emphasis had been given the mark with respect to all the products.

The same principle has been followed in *Prest-O-Lite Co.* v. *Davis*, 215 Fed. 349, 352 (6th Cir. 1914); and *The Edna Smelting & Rfg. Co.* v. *Nathan Mfg. Co.*, 30 App. D. C. 487 (D.D.C. 1908) and was discussed with approval in *Collis Co.* v. *Consolidated Machine Tool Corp.*, 41 F.2d 641, 644 (8th Cir. 1930). See also, 3 CALLMANN, UNFAIR COMPETITION AND TRADE-MARKS, 1164-1166 (1950); 1 NIMS, UNFAIR COMPETITION AND TRADEMARKS, 581 (4th ed. 1947); *Riverbank Laboratories* v. *Hardwood Products Corp.*, 165 F. Supp. 747, 764 (N.D. Ill. 1958) ("Where products or services are related, as in the Enders case, and one name is

applied to them all, it is unlikely that the relevant buying public will understand the name as a generic designation for but one of the products.").

The Court by isolating only *one* product for genericness was led to the extraordinary result of the *divisible* trademark, a legal concept heretofore unknown. The District Court expressly held that ROOTS was *not* generic and was a valid trademark in association with the lobe gas meter, of substantially the same design as the figure 8 lobe pump; lobe pumps of other configurations; centrifugal pumps; screw pumps; and any and all other products sold by Petitioner under the ROOTS trademark (A-23). It found ROOTS generic only in association with pumps "incorporating the design or principle referred to in Patent No. 2369," but then cancelled Petitioner's federal registrations covering all "rotary positive displacement lobe-type pumps, blowers and compressors" (A-23, 24). Since lobes are made in thousands of designs, what are now the rights of the public and Petitioner? No one knows.

Moreover, the holding also jeopardizes the validity of many famous, extremely valuable multi-product trademarks. For example, the following selected trademarks, taken from the United States Trademark Association "List of Well-Known Trademarks," are used on the indicated products and frequently others:

BAND-AID adhesive bandages, spray antiseptic
CANTEEN vending and food services
CARBORUNDUM abrasive and refractory products
CATERPILLAR crawler tractors
COMPTOMETER calculating machines
DIXIE paper and/or plastic cups, plates, etc.
FRIGIDAIRE appliances
JELL-O gelatin dessert

LEVI'S jeans and sportswear
LINOTYPE typesetting machine
MASONITE hardboard products
POLAROID photographic equipment
Q-TIPS cotton swabs and cotton balls
SCOTCH brand transparent, masking, electrical tape, etc.
SIMONIZ waxes and polishes
VASELINE petroleum jelly, hair tonic

Are millions of dollars in multi-product trademark use and advertising now utterly wasted when the genericness test is applied? And is advertising of the following type now to no avail?

> "Full names are important, with products as well as people. Johnson & Johnson makes a whole family of products under the Band-Aid brand, from Band-Aid brand adhesive bandages to Band-Aid brand air-vent adhesive tape to Band-Aid brand spray antiseptic. We like to be talked about, but just as there's more than one woman named Smith, there's a more than one product with the Band-Aid brand. A whole family of products carry the Band-Aid brand to indicate 'made by Johnson & Johnson.' So, always follow the 'Band-Aid' brand with the product name."[2]

The heretofore uniform view is that *Singer* is inapplicable where the mark is used on numerous related products, and the refusal to follow this authority places the Third Circuit squarely in conflict with the Sixth, Eighth and District of Columbia Circuits. It also imposes far-reaching implications on the public and the owners of many famous trademarks.

3. Before this case the business and legal community believed that the 1896 *Singer* doctrine had become anach-

[2] Diamond, *Advertising Can Preserve Trademark Rights*, ADVERTISING AGE, December 19, 1966.

ronistic and obsolete. Between 1896 and the passage of the Lanham Act in 1946, *Singer* was applied 36 times by the federal courts to hold a trademark generic, while an exception was followed, and the trademark found valid, in 18 cases. By contrast, from 1946 to the present (excepting the present case) *Singer* has been applied to hold a mark generic only 3 times and has been rejected 8 times. (See Appendix C, *infra*). At the same time the rate at which patents expired almost doubled from 1,510,566 between 1896 and 1946 to 1,123,340 from 1946 to the present, and the granted federal trademark or service mark registrations increased from 391,031, in the earlier 50 year period, to 436,263 in the last 22 years. Thus, during a period of dynamic national increase in technology and patenting, and the advent of television and other mass advertising media of trademark exposure, the trend has been clearly away from *Singer*.

As early as 1936 the distinguished authority Professor Walter J. Derenberg recognized this trend, and wrote of *Singer* in TRADE-MARK PROTECTION AND UNFAIR TRADING 622 (1936):

> "In the course of years, there have been so many deviations from and exceptions to this theory, that its practical importance and effect have become almost negligible. One wonders whether this principle, in its original form, as laid down by the Supreme Court in the *Singer* case, is not too inclusive today."

Other recognized authorities have consistently maintained that patent expiration has no bearing on genericness. For example, the RESTATEMENT, TORTS, Sec. 735 (1938), states as follows:

> "There is no rule that a trade-mark for a patented article ceases to be a trade-mark on the expiration of the patent.... it is unnecessary to discriminate between cases where the patentee used the designation as a

> trade-mark before the patent was granted and those in which the trademark use and the grant of the patent were simultaneous or those in which the designation was adopted after the patent was granted."

And in *President Suspender Co.* v. *MacWilliam,* 238 Fed. 159, 163 (2d Cir.), *cert. denied,* 243 U.S. 636 (1916), the court stated the rule as follows:

> "There is no presumption of law, without proof of the fact . . . that a name used on a patented article passes to the public on the expiration of the patent."

Accord, Marks v. *Polaroid Corp.,* 129 F. Supp. 243, 272 (D. Mass. 1955), *aff'd* 237 F.2d 428 (1st Cir. 1956) *cert. denied,* 352 U.S. 1005 (1957); 1 NIMS, UNFAIR COMPETITION AND TRADEMARKS 578 (4th ed. 1947); 3 CALLMANN, UNFAIR COMPETITION AND TRADEMARKS, 1164 (1950); Handler and Pickett, *Trade Marks and Trade Names,* 30 Colum. L. Rev. 168, 187 (1930).

Notwithstanding all of this and other authority, however, the Court of Appeals has now emasculated Petitioner's century-old trademark by reviving *Singer* in all its pre-1900 glory (B-13):

> "And, finally, the plaintiff says the Singer decision is outmoded and of sharply limited application. We cannot agree."

This approach deals the development of modern trademark law a half-century setback by re-instituting a legal presumption of genericness arising from patent coverage. The Court of Appeals denies that this is what it did, but its express *Singer* holding belies its protestations that genericness is simply a question of fact to be determined wholly apart from patent coverage. If this were true, why was *Singer* mentioned at all? Its sole *raison d'etre* is the dual proposition that a trademark on a patent-expired prod-

uct is more infirm than that on an unpatented product, and that the public has a greater right to use a trademark generically where the trademarked product is patented. Neither aspect bears scrutiny.

As a viable legal doctrine *Singer* on this point has long since outlived its usefulness. It has no place in modern trademark law, and has engendered only exceptions, occasional lip service, and an inability of courts to appreciate its inherent limitations. To condone a modern *Singer* renaissance without review by this Court would work a profound, sweeping legal retrogression and a repudiation of the admonition of Mr. Justice Holmes in *Bourjois & Co.* v. *Katzel,* 260 U.S. 689 (1923), that trademarks and good will comprise ". . . a delicate matter that may be of great value but that easily is destroyed, and therefore should be protected with corresponding care."

4. The Court of Appeals, in departing drastically from the widely accepted genericness test stated by Judge Learned Hand in *Bayer Co.* v. *United Drug Co.,* 272 Fed. 505, 509 (S.D. N.Y. 1921):

> "What do the buyers understand by the word for whose use the parties are contending?"

raised an important question of federal trademarks law which has not been, but should be, settled by this Court. In this case, the courts were motivated by the *antitrust* law product competition test of "relevant market," and applied a truncated version of it in the *trademark* field in lieu of the "relevant purchasing public" test.

Since many persons never buy pumps or blowers, less than all of the general public comprise the "relevant purchasing public"—those who have purchased or who may purchase them—in which likelihood of confusion and trademark meaning are tested. Within that segment pump

and blower trademark recognition has been established (where ROOTS is as famous a trademark as WESTINGHOUSE and FORD are to the general public), and individuals are likely to assume that all products advertised under ROOTS emanate from or are somehow associated with Petitioner. It is to them, not college professors or patents, that a word has relevant meaning, since it is only they who have had the myriad marketplace associations that influence thought processes and create likelihood of confusion or trademark or generic meaning.

Nevertheless, forgetting buyers completely, the Court of Appeals viewed the entire matter as one of *product* competition. It characterized the "market" as follows (B-2):

> The *goods* with which the parties compete in the market in this country are rotary positive displacement lobe-type vacuum pumps. (emphasis added)

And further adopted this view (B-13, 14):

> In this case the district court found that *the relevant market shared by the parties was rotary positive displacement lobe-type pumps* incorporating the design disclosed in the Roots 1860 patent and that it was only as to pumps incorporating this design that the word had become generic. (emphasis added)

On this basis the courts disregarded the extent to which screw and centrifugal pumps compete with lobe pumps, and the fact that *all* ROOTS products are sold and advertised under the mark to the buyers of lobe pumps.

By limiting the market to identical products in which the parties are in direct competition the courts in effect restricted the relevant purchasing public to buyers which buy lobe pumps exclusively, specifically those costing in excess of $1,300 and which are sold mainly by competitive bids. That "market" excluded the actual buyers of 60-70% of

Petitioner's lobe pumps. The test used by the lower courts thus incorporated only 30-40% of a lobe pump buying public. Actually there is no such thing as a lobe pump buying public, since buyers of lobe pumps also buy centrifugal pumps, screw pumps and countless other types of pumps.

In restricting the test to competition between $1,300 and up lobe pump and $1,300 and up lobe pump, the Courts followed somewhat the "relevant market" approach rejected by this Court in the "cellophane" case, *United States* v. *E. I. duPont de Nemours & Co.*, 351 U.S. 377 (1956). In that case in determining "relevant market" under Section 2 of The Sherman Act the test was not whether cellophane competed only with cellophane, in which case duPont would have had 75% of the relevant market, but whether cellophane competed with flexible packaging materials of all types, in which case duPont had less than 20% of the market. The same broad view was also taken in *United States* v. *Continental Can Co.*, 378 U.S. 441 (1964) (relevant market glass *and* metal containers) and *United States* v. *Grinnell Corp.*, 384 U.S. 563 (1966) (relevant market entire accredited central station service property protection industry).

In this case the relevant purchasing public, defined for a totally different purpose than determining monopoly power, must include all buyers and potential buyers of any and all types of pumps. It cannot consist of an adumbrative, indeed non-existent, group of buyers of higher-priced lobe pumps only. As this Court observed in "cellophane," "Industrial activities cannot be confined to trim categories." 351 U.S. at 395.

The basic District Court theory that "since trademarks have significance only in the context of competition, the class of buyers here must be restricted to include only those for whose business the parties are competing" (A-10) went out decades ago with the old 1905 Federal Trademarks Act product competition test (Trademark Act of 1905, ch. 592, § 16, 33 Stat. 728):

> Any person who shall, without the consent of the owner thereof, reproduce, counterfeit, copy, or colorably imitate any such trade-mark *and affix the same to merchandise of substantially the same descriptive properties as those set forth in the registration* . . . shall be liable to an action for damages therefor at the suit of the owner thereof . . . (emphasis added)

Today, however, the 1946 Lanham Act defines infringement where trademark use "is likely to cause confusion, or to cause mistake, or to deceive." 15 U.S.C. § 1114(1)(D-1). Thus, product competition is no longer the test. Additional law is collected in 2 NIMS, UNFAIR COMPETITION AND TRADEMARKS 374 (4th ed. 1947), which concludes that "Lack of competition between the parties no longer is a defense to an action for unfair competition." See also *Yale Electric Corp.* v. *Robertson,* 26 F.2d 972 (2d Cir. 1928); *Kotabs, Inc.* v. *Kotex Co.,* 50 F.2d 810 (3rd Cir.), *cert. denied,* 284 U.S. 665 (1931).

The trap which the tunnel vision test created was foreseeable. The courts restricted their discussion to sophisticated purchasers of relatively expensive ($1,300 and up) lobe pumps who purchased with care. Yet, ignoring all the non-technically trained buyers and buyers of less expensive products, the courts, on the testimony of one college professor and no proof as to even a majority of the purchasing public, held the mark generic to all, including the *unsophisticated* purchaser, even though the *meaning to him was never even tested.* The result is impossible. Respondent and others are apparently now free to use ROOTS with impunity in selling $95 off-the-shelf pumps to non-technically trained calliope operators and fish store owners. It is difficult to imagine a more bizarre result. Public protection and elementary fairness and justice at the very least dictate that if the mark is to be held generic among this segment, this segment of the market be included in the genericness test.

CONCLUSION

The incorrect application of *Singer* and the application of an incorrect test for "relevant purchasing public" have led to an intolerable result. Petitioner urges that the writ be granted, so that this Court may review the important questions of federal trademarks law presented and determine whether the *Singer* case should be overruled.

Respectfully submitted,

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APPENDIX A

OPINION OF DISTRICT COURT

WILLSON, *J.*

The plaintiff in this action is Dresser Industries, Inc., a Delaware corporation having its principal place of business at Dallas, Texas. The defendant is Heraeus Engelhard Vacuum, Inc., a Delaware corporation having its principal place of business at Monroeville, Pennsylvania, in this District. In the complaint, plaintiff alleges that this action is brought under the federal trademark statute, 15 U. S. C. §§ 1051-1127, and that the jurisdiction of this Court is based upon 15 U. S. C. § 1121 and 28 U. S. C. § 1338.

Plaintiff, through its Roots-Connersville division, manufactures and sells rotary positive displacement vacuum pumps. Defendant's corporate parent W. C. Heraeus, GmbH, of Hanau, Germany, manufactures in that country similar pumps for which defendant is the marketing agent in the United States. Defendant markets pumps ranging in price from about $1,300 to $25,000 and up. Competitive bidding accounts for about 30 to 50 percent of the sales in this range, with the percentage of competitive bidding rising as the price increases. The remainder of sales are made as a result of inquiries and orders from prospective buyers. Its buyers include federal departments and agencies, companies in the aerospace, steel, chemical and electrical industries, and universities and laboratories. It advertises its products in selected trade and technical journals. The controversy here is over the use by the defendant of the word Roots in advertising the rotary positive displacement vacuum pumps manufactured by W. C. Heraeus. The parties have stipulated that defendant has not affixed the

word Roots to any of its manufactured products. Nor has defendant affixed the word Roots to any of the boxes, containers, or wrappers in which its products are shipped throughout the country.

In the complaint, plaintiff sets forth its allegations under three counts. The first count is styled "Trademark Infringement." Plaintiff alleges that it is the owner of six trademarks, the registrations of which are in full force and effect, and which have been variously and continuously used on the several products manufactured and sold by plaintiff. Plaintiff alleges that the use of the trademarks, both on its goods and in advertising with respect to them, together with "continuous and expensive maintaining of high standards of excellence of products," has resulted in a very favorable consumer identification of the trademarks with it and its products. Plaintiff finally alleges that despite its long-established prior right to the use of the trademarks in connection with a wide variety of products, defendant began in 1963 to use one of the trademarks, the word ROOTS, in connection with the advertisement and sale of blowers and pumps, and that such use wrongfully identifies and represents the defendant's products with and as those of the plaintiff, and does and will cause confusion, deception or mistake, in violation of 15 U. S. C. § 1114(1).

The second count is styled "Federal Unfair Competition." Plaintiff repeats the allegations in the first count and alleges that defendant's use of the word ROOTS with respect to its products constitutes a false designation of origin, in violation of 15 U. S. C. § 1125(a).

The third count is styled "Common Law Unfair Competition." Plaintiff repeats the allegations made in the first and second counts, and alleges that although defendant

had knowledge of the prior use of the plaintiff's trademarks, defendant used the word ROOTS in advertising its products, thereby promoting its products in such a manner as to suggest association with plaintiff and to cause confusion, deception or mistake as to the origin of defendant's products, and profiting unlawfully from consequent sales.

Plaintiff seeks both injunctive relief and monetary damages.

In its answer, defendant essentially denies that the designation ROOTS in the form asserted by plaintiff constitutes a trademark, and alleges that any alleged trademark or registration of which ROOTS is all or a significant portion is invalid and unenforceable against defendant in that the word Roots is and has been since at least 1900 in the public domain as signifying "an engineering principle and/or an equipment type and/or an equipment type incorporating said principle," or that the designation Roots was abandoned as a trademark by plaintiff. Defendant says that its use of the word Roots has been merely descriptive of the equipment it makes and that it has been using the word Roots in a generic sense and in good faith and it had been so used prior to the later registrations of the word Roots as a trademark by the plaintiff. Defendant alleges that the later registrations of the word Roots as a trademark by the plaintiff were fraudulently obtained, and that plaintiff has violated the anti-trust laws in that it has interfered in free commerce and competition by seeking to prevent others from using the words Roots in connection with fluid handling equipment. Defendant finally alleges that the word Roots has become a generic designation for a type of fluid handling equipment and cannot be exclusively appropriated by plaintiff. In its counterclaim, defendant alleges that despite the fact that

the word Roots has been in the public domain, has come to identify a principle or type of equipment and has become generic with respect to identifying such type of equipment, plaintiff has applied for certain trademark registrations involving use of the word, and that therefore the registrations were "improperly if not fraudulently obtained," and that plaintiff has thereupon unfairly competed with defendant in attempting to restrict the lawful use of the word Roots. As relief, defendant seeks the cancellation of plaintiff's registrations of the word Roots, assessment of damages suffered by defendant as a result of plaintiff's allegedly fraudulent registration and unfair competition, and punitive damages for violation of the anti-trust laws.

The corporate background of this controversy, as stipulated to by counsel, is important to an understanding of the contentions of both parties. In 1846, Alanson Roots and his sons Philander and Francis founded the Roots Woolen Mill in Connersville, Indiana. For almost three decades the Roots Mill manufactured and sold nationally a variety of cloth products. Between 1854 and 1859, the Roots brothers established, as a sideline to the woolen mill, a separate business under the name of The P. H. & F. M. Roots Company to develop, manufacture and sell rotary air blowers and related products. A patent for a rotary blower was issued to P. H. Roots in 1860 and reissued in 1866. [Appendix "A".] When the Roots Mill burned to the ground in 1875, the Roots brothers became active solely in the P. H. & F. M. Roots Company. In 1929, The P. H. & F. M. Roots Company, which had previously become a division of The Stacey Engineering Company, was merged with the Connersville Blower Co., and the resulting corporate entity was known as Roots-Connersville-Wilbraham, a division of the International Stacey Corp. In 1934, the assets of Roots-Connersville-Wilbraham were transferred to The Connersville Blower

Company, Inc., and its name changed to Roots-Connersville Blower Corp. In 1944, Dresser Industries, Inc., purchased all the stock of International Stacey, acquiring thereby the stock of Roots-Connersville Blower Corp. In 1952, Roots-Connersville Blower Corporation sold all its assets to Dresser, and was then dissolved. Dresser Industries in that year created a division called Roots-Connersville Blower, the name of which was shortened, in 1965, to Roots-Connersville. In this manner, plaintiff became the owner of, inter alia, the patents and trademarks owned by The P. H. & F. M. Roots Company and its successors. Through the years, the product line of Roots-Connersville has been greatly expanded so that it now manufactures all sort of air and gas handling equipment—pumps, blowers and exhausters based on various engineering principles, gas meters, and accessories—and is now developing electronics instruments.

Meanwhile, the design disclosed by the 1860-66 patent, in the words of defendant's counsel, "took hold the world over." Blowers of this type, manufactured by The P. H. & F. M. Roots Company or its foreign licensees, were exhibited at and won the highest prizes awarded by the International Exhibitions of Paris in 1867, Vienna in 1873 and Philadelphia (United States Centennial) in 1876. The P. H. & F. M. Roots Company catalog of 1878 is replete with testimonials from users and descriptions of use in a variety of installations ranging from forcing blast furnaces through ventilating buildings to powering church organs. That the design principle disclosed in the 1860-66 patent has generated considerable interest in engineering and industrial circles, and has retained its appeal to the present time, is borne out by the fact that between 1866 and 1965, more than 50 patents have been issued in this country for designs of equipment based on the rotary

positive displacement principle disclosed in the original P. H. Roots patent. Perusal of the technical literature and advertising introduced at trial indicate that the diversity of uses of equipment embodying this principle has increased with the advances made by technology in all fields in this century. Since the 1950's advances in medium-to-high-vacuum technology and its applications and a heightened national interest in aerospace research and development have created a demand for large and costly installations for which the rotary positive displacement vacuum pump is eminently suitable. It appears from catalogs introduced into evidence that at least half a dozen major companies now manufacture and sell this type of pump. These pumps, often large and expensive as set forth above often are sold as a result of an inquiry by or a direct order from the prospective user. In these sales, advertising may play a significant role, and in advertising, the descriptive words used are often of paramount importance. Other sales are made as a result of competitive bidding. Many invitations to bid, introduced at trial, indicated that the prospective purchasers, among whom were the National Bureau of Standards, the United States Air Force, Grumman Aircraft Engineering Corporation and the General Electric Company, specified "Roots-type," "Roots," "roots," or "Roots type" pumps. In this context, it is readily seen that it is of considerable commercial importance to plaintiff, on the one hand, to restrict the use of the word Roots to its own products, and to the defendant, on the other, to be free to use the word Roots with respect to advertising its products.

In 1955, W. C. Heraeus began distributing, in the United States, its vacuum equipment through Consolidated Electrodynamics Corporation (now Consolidated Vacuum Corporation) on an exclusive distributorship basis.

Consolidated advertising the Heraeus rotary positive displacement pumps under designations such as "Roots Pumps," "Roots Blowers," and the like. Plaintiff protested such use, contending at first that the word Roots had, in industry, come to mean products of Roots-Connersville, and that Consolidated's use of the word in its advertising would be likely to cause confusion. Consolidated deferred to plaintiff's protest, and, as suggested by plaintiff, began advertising the Heraeus rotary positive displacement pumps as "Heraeus Roots Pump" or "Roots Type Pump." Later, after plaintiff had obtained registration of the word Roots as a trademark in 1961 it objected to Consolidated's use of the word in any manner in its advertising, whereupon Consolidated discontinued use of the word Roots entirely. In 1963, defendant was formed as a subsidiary of W. C. Heraeus, GmbH, and begun distributing Heraeus products in this country. In its advertising, defendant referred to Heraeus rotary positive displacement pumps variously as "Heraeus Roots Pumps," "Roots pump," and "Roots blowers." Plaintiff protested against such use, but defendant refused to accede, contending that its use of the word Roots was as a generic term designating and identifying an engineering principle or an equipment type. Defendant continued to use the word Roots in its advertising and this action ensued. Defendant, in March 1965, some four months after the complaint in this action was filed, discontinued the use of the word Roots in its trade journal advertising pending the decision on this action, although it continued the use of the word Roots in its catalogs thereafter.

Plaintiff alleges ownership of six trademark registrations and one non-registered design mark involving the use of the word Roots [Appendix "B"]. Defendant has not contested whatever right plaintiff may have to its

design or word trademark registrations involving ROOTS-CONNERSVILLE. Although these marks are thus not at issue, they remain pertinent to this action in that they indicate the extent to which plaintiff made use of the word Roots in the years following the Roots-Connersville merger in 1929. It is clear that prior to the merger, the P. H. & F. M. Roots Company used the word Roots, either in plain Roman or in the design covered by the 1922 registration, alone or with other trademarks, to advertise and identify its products. After the merger, the design Roots was used for some time to mark machinery, as the company continued to use up its supply of pre-merger nameplates. The design Roots was also used in castings for some of the larger machines, even as late as 1950. However, the post-merger advertising bore the name of the company, with the name being changed in the advertising to reflect the successive corporate changes of the company, and a new logotype appeared. This was the non-registered design mark ROOTS-CONNERSVILLE [Appendix "B", No. 7]; in it the word ROOTS is emphasized over, but is nevertheless joined with, CONNERSVILLE to make the design. This mark was used on far more nameplates than any other trademarks, almost completely replaced the design ROOTS in the company's advertising, and was used as late as 1955. Concurrently, ROOTS-CONNERSVILLE, either in plain Roman or in simple design [Appendix "B", No. 3], with both words being given equal emphasis, was used in advertising and in product marking, the simple design making its appearance late in the 1940's. During this period, the products were referred to in the text of the advertising as "ROOTS-CONNERSVILLE" or "R-C," but never as "Roots." In 1955, another ROOTS-CONNERSVILLE design [Appendix "B", No. 2] came into use and was registered, but its use at first was supple-

mentary to rather than exclusive of the earlier marks, which however were discontinued in 1960. In 1961 the word ROOTS in plain Roman was registered; it was at first used with and emphasized over "Connersville," especially in machine marking, but has been used alone in advertising since registration.

Roots-Connersville and its predecessors have, with few exceptions, employed the trademarks described above to designate its entire product line. Defendant, on the other hand, has employed ROOTS only to designate, and in advertising only, W. C. Heraeus rotary positive displacement vacuum pumps. It has been defendant's chief contention that its use of the word ROOTS has been to describe the type of pumps or to refer to the engineering principle involved in their design and construction. Defendant has contended that this type of equipment and this principle have become so widely known to those versed in the art that the word ROOTS has become descriptive or has acquired a generic significance when applied to pumps, and as such cannot be registered as a trademark.

The word ROOTS is derived, as has been seen, from plaintiff's predecessor in interest, The P. H. & F. M. Roots Company, which in turn took its name from the Roots brothers who founded it. As ROOTS is thus an ordinary surname, it was incapable of being exclusively appropriated as a trademark at common law. However, by statute, surnames may be accorded registration as trademarks provided certain conditions are met. *Thaddeus Davids Co.* v. *Davids Mfg. Co.*, 233 U. S. 461. Registration of a surname as a trademark is conditioned upon the mark's becoming distinctive of the applicant's goods in commerce, prima facie evidence of which is—"substantially exclusive and continuous use thereof as a mark by

the applicant in commerce for the five years next preceding the date of the filing of the application." 15 U.S.C. § 1052 (f). Defendant makes much of the five-year exclusive use condition in attacking the validity of plaintiff's last two registrations, but in view of this Court's findings and decision that the word ROOTS is generic, this contention is not deemed material to the disposition of this action and will not be further considered.

Where, during the life of a patent, a name, whether it be arbitrary or that of the inventor, has become the identifying and generic name of the thing patented, this name passes to the public with the expiration of the patent. *Singer Mfg. Co.* v. *June Mfg. Co.*, 163 U. S. 169. However, the mere expiration of the patent covering the thing patented does not cause the name of the thing to pass, along with the teaching of the patent, into the public domain. The test is whether the name of the patented thing has become generic, that is, whether the name of the patented thing has come to mean primarily what kind of thing it is, rather than that it comes from a single source. The test for deciding whether a name has become a generic title of a product is "What do the buyers understand by the word for whose use the parties are contending?" *Bayer Co.* v. *United Drug Co.*, 272 Fed. 505.

Before this question can be answered, however, it is necessary first to determine the composition of the class of buyers for whose trade the parties are competing. Plaintiff takes an expansive view of this class, and would include in it all potential customers for its entire product line, which in its specialized way is quite diverse. However, since trademarks have significance only in the context of competition, the class of buyers here must be restricted to include only those for whose business the parties are competing. In determining the composition

of this class, it is necessary to consider the end-use of these goods, their price, relevant advertising and media, and actual and attempted sales.

Vacuum pumps are used by companies in the metallurgical, aerospace, electronics and chemical industries, both in production and in laboratory installations, by federal departments and agencies, and by universities and laboratories. The vacuum pumps manufactured and sold by both plaintiff and defendant range in price from $1,550 to $75,000. However, it is important to note that while vacuum pump units are themselves rather expensive, they are but components of larger and costlier installations. For instance, defendant's president testified that he was personally involved in the sale of space chambers priced at one-and-three-quarter million dollars and an installation at Jet Propulsion Laboratories in Pasadena costing four million dollars.

Defendant's evidence showed that 30 to 50 percent of its sales in the lowest price range were made on the basis of competitive bidding and that the percentage of sales thus made increased with the price of the unit so that all sales in the higher price range, as well as all federal government sales, were made on the basis of competitive bidding. The evidence showed that while direct sales in the lower price range were made through the customers' purchasing agents, often men with little technical background, these purchases were nevertheless made on the basis of specifications drafted by the customers' engineers, in the same manner as, although perhaps less formally and extensively than, sales on competitive bidding.

Defendant has advertised its pumps by means of catalogs which were distributed in the usual manner to interested persons or companies active in the fields men-

tioned above, and by means of advertisements which appeared in such trade or technical publications as "Iron Age," "Metal Progress," "Iron and Steel," "Research/Development," and "Vacuum Technology." Defendant's customers have included United States Steel, Republic Steel, Boeing Aircraft, Lockheed Aircraft, the National Bureau of Standards and Brookhaven Laboratories.

It is clear that the market for which the parties are competing is not of the over-the-counter type, where purchases are made with haste and without reflection. Nor is it a market where the purchasers are ignorant of the characteristics of the goods offered. Instead, the market is seen to be relatively small and selective, where products are sizeable and expensive and their end use is in installations even more sizeable and expensive, and the buyers are possessed of considerable technical knowledge and experience. It is in this context that the question—"What do the buyers understand by the word Roots?"—must be decided.

A major part of the evidence is addressed to this question. Both parties offered the testimony of various officers and employees of their respective companies. This testimony was understandably partisan and of but little probative value. Plaintiff also offered, as evidence of consumer identification of the word ROOTS with Roots-Connersville and its products, testimony of three of its customers and statements by twenty-five others of its customers. Considering the selectivity involved in obtaining this evidence, it is of little validity as a poll; and considering the fact that but one of the customers is engaged in the vacuum field, these statements have little weight.

Important evidence on this point was presented by the parties in offering the testimony of academic experts and

in offering technical and professional literature, for this tended strongly to show what engineers and other technical people in this field understood the word ROOTS to mean when they encountered it and what the word ROOTS meant when they themselves used it, in the texts and illustrations of patents, in textbooks, in classrooms; in research and reference articles, in handbooks, in writing or responding to competitive bids, in communicating with each other, and in shop talk among themselves. Plaintiff's experts were Richard J. Grosh, Associate Dean of the School of Engineering of Purdue University, and Harold E. Hoelscher, Dean of the School of Engineering of the University of Pittsburgh. Both testified that the word ROOTS meant Roots-Connersville or its products, that "Roots-type" meant—"of the sort manufactured by Roots-Connersville," and that the expressions "Roots pump" or "Roots principle" as applied to pumps or blowers, were misnomers or imprecise uses of words and as such inconsonant with the best engineering practice. Defendant's expert was Ascher H. Shapiro, Ford Professor of Engineering and Head of the Department of Mechanical Engineering at the Massachusetts Institute of Technology. He testified that the word ROOTS, when applied to pumps or blowers, designated pumps or blowers operating according to a certain particular concept or principle. This principle, which Professor Shapiro testified was known throughout the world to those working in the field of air and gas handling as "the Roots principle," was defined by him as—

> "[T]hat of a pair of counter-rotating impellers in a casing which is approximately oval or elliptical shaped. The rotors have a number of lobes on them, usually two, but sometimes three or four. They mesh with each other in such a way as to prevent back leakage.
>
> "And also, as they rotate they encapsulate volumes of air between the lobes and the casing, and transport

> those volumes from the inlet side to the discharge side so that the general direction of flow is a cross-flow. That is, crosswise to the axis of the two rotors." Record, p. 361, line 24 to p. 362, line 9.

Professor Shapiro identified the Roots principle, so defined, with the principle disclosed in the 1860-66 P. H. Roots patent and with the principle of operation of the pumps manufactured by W. C. Heraeus and advertised by Heraeus and by defendant as "Roots pumps" or "Heraeus Roots pumps." Professor Shapiro testified that the word ROOTS had acquired such currency among those in the air and gas handling field as descriptive of this principle and of the equipment manufactured according to this principle that it was not necessary to use the suffix "-type" to complete the meaning conveyed by the word ROOTS. Professor Shapiro testified that for some years, from 1950 to 1957, he taught a graduate course at MIT on fluid handling machinery. This course, which was also taught by other MIT faculty members to undergraduates, was designed to give students a familiarity with characteristics of various types of pumps. Professor Shapiro's testimony indicated that he and his associates taught that the word ROOTS signified a specific type of pump and was descriptive of this pump and its underlying principle and that this pump, called the Roots pump, was distinct from any other type of pump and different in its characteristics. Professor Shapiro testified that what he taught in this course was in accord with the general understanding of engineers all over, that is, that a Roots pump was a rotary pump consisting of two counter-rotating and intermeshing impellers in a casing, and that such a pump was known as a Roots pump.

Also of great significance in determining what the word ROOTS means to the relevant buyers is the literature offered by both parties. This literature was compendious;

it included copies of patents, texts, handbooks, encyclopedias, articles in technical and professional periodicals, reprints of presentations before learned societies, training manuals and specifications accompanying advertisements for bids. Plaintiff's evidence showed that machines designed and constructed on what the defendant has called the Roots principle i.e., the principle disclosed in the 1860-66 P. H. Roots patent, have been quite frequently referred to by terms other than Roots-pumps, -blowers, -compressors and the like. Plaintiff's evidence showed these machines identified as "mechanical pumps," "mechanical blowers," and "mechanical boosters," "lobe type pumps," ["-blowers" and "-boosters"], "rotary pumps," ["-blowers" and "-boosters"] "positive displacement pumps," ["-blowers" and "boosters"], et cetera.

Defendant's evidence showed a widespread usage, of long standing, of ROOTS to designate this equipment. Defendant offered the 1916, 1941, 1951 and 1958 editions of the Mechanical Engineers' Handbook [commonly known as "Marks" after its editor]. Marks, characterized by Professor Shapiro as a very well-known handbook used by mechanical engineers of all types and by chemical engineers and aeronautical engineers, and a "best seller" among engineering books, contained numerous references to and discussions of the "Roots pump" and the "Roots blower." The illustrations in Marks labeled "Roots blower" depicted a machine consisting of twin-lobed counterrotating impellers mounted in a casing, the configuration identified by Professor Shapiro as a blower or pump constructed on the "Roots principle" and known as a "Roots blower." Defendant offered copies of several patents, issued between 1915 and 1964 and belonging to various persons and companies, plaintiff and W. C. Heraeus included, which related to improvements on or auxiliary equipment for pumps and

blowers. The language of the patents contains references to "Roots" or "Roots type" pumps and blowers and indicates that the teachings of the patents relate to "Roots" or "Roots type" pumps and blowers. In many of these patents, the principle of operation of the pumps and blowers is described in terms essentially identical to those used by Professor Shapiro to describe the "Roots principle," and the figures accompanying the text display a pump or blower whose configuration is identical to that which Professor Shapiro identified as the "Roots" configuration. Defendant offered several reports of the National Advisory Committee for Aeronautics [the predecessor of NASA] dated 1926, 1927, 1932 and 1936, which deal with tests performed upon the "N. A. C. A. Roots type supercharger," the illustration of which shows it to be a machine conforming to the "Roots principle" as defined by Professor Shapiro. Defendant offered numerous texts, handbooks, encyclopedia entries, articles in professional and trade periodicals and monographs published by the American Vacuum Society and others which deal with the "Roots blower," the "Roots booster," and the "Roots pump," and which contain illustrations and textual descriptions making it clear that the authors were speaking of machines conforming to Professor Shapiro's definition of the "Roots pump" and the "Roots principle." Defendant offered a publication of the Training Section of the Industrial Relations Department of the Aero-space Division of the Boeing Company entitled "Practical Vacuum System Design." This publication, used in training Boeing personnel in vacuum technology, devotes a section to "Mechanical Booster Pumps" and states:—"The pump most suitable for this use is the Roots type rotary lobe pump. In this type pump . . . two kidney shaped eccentrics are used, so mounted that they interlock to trap a

compressible volume of gas . . . The lobes never touch each other or the casing, . . ." Defendant offered four invitations for bids: the first from the National Bureau of Standards, which stated—"The two stage high capacity unit shall consist of a Roots-type dry blower . . . and a 300 CFM rotary oil sealed piston mechanical high vacuum pump second stage;" the second from Grumman Aircraft Engineering Corporation which calls for "diffusion ejector pumps, roots blowers, or mechanical pumps as appropriate;" the third from NASA which called for "diffusion-ejector pumps, roots blowers, or mechanical pumps as appropriate;" and the fourth from the Arnold Engineering Development Center of the United States Air Force, which calls for "a 6-stage cascade of Roots blowers plus one stage of rotary oil sealed pumps," with a reference to a schematic diagram which shows, next to the label "Roots Blower," the symbol tentatively adopted by the American Vacuum Society to designate pumps operating on what Professor Shapiro described as the "Roots principle."

Defendant offered three examples of the advertising usage of the word Roots by plaintiff's own Dresser Vacuum division: the first, an advertisement appearing in the October 1964 issue of "Research/Development" which contained, next to the label "Roots Blowers (by Dresser/Leybold)" a photograph of a machine which appears to be a pump constructed in accordance with what Professor Shapiro called the "Roots principle," and the second and third, the 1965 and 1966 "Vacuum Technology Buyer's Guide and Directory" which list under the heading "Blowers" the company "Dresser Vacuum" and the specifications "roots type" and under the heading "Blower-Pump Combinations" the company "Dresser Vacuum" and the specifications "Roots type." Defendant offered a reprint of an article from the "1961 Transactions of the Eighth Vacuum

Symposium and Second International Congress [1962]," the authors of which are shown to be employees of the Roots-Connersville Blower Division [the predecessor of the Roots-Connersville division of the plaintiff], in which the following appears:—"Roots-type compressors are quite simple. Two figure-eight shaped counterrotating impellers operate within a case. . . ." In this reprint there is an illustration showing a diagram of a pump operating on what Professor Shapiro described as the "Roots principle" and which is labeled "Roots type compressor showing principle of operation." Defendant introduced a copy of a letter from the president of the Roots-Connersville Blower division of plaintiff, dated February 8, 1960 and written to the advertising manager of Consolidated Electrodynamics Corporation, which was at that time distributor for W. C. Heraeus pumps, in which it is stated:—"If it is necessary to refer [in CEC advertising of W. C. Heraeus pumps] to the Roots lobe design this can be further clarified by an indication that the design is of the Roots principle."

It seems to the Court that the letter just quoted coming from plaintiff at a time prior to any lawsuit or dispute between the parties is of the utmost significance. The letter speaks of the Roots lobe design and "that the design is of the Roots principle.". Here the word ROOTS is used by a former president of plaintiff in a generic sense. This is the contention made by the defendant in the instant litigation.

It is clear that the weight of the expert and documentary evidence favors defendant in its contention that ROOTS means, to buyers in the air and gas handling fields, an engineering principle or equipment designed in accordance with that principle. Plaintiff's experts displayed an almost incredible bias, and by their reaction to the documents

produced by defendant on their cross-examination exhibited a pedantic attitude which failed however to disguise their closed-mindedness. Plaintiff's documentary evidence is addressed to the proposition that there are other names for this equipment. This proposition may be valid, but it does not answer the question—"What does ROOTS mean to the buyer?"—and so is entitled to little weight.

Defendant's expert, in contrast to plaintiff's experts, was objective in his testimony, which was direct and to the point. He candidly admitted that there were other terms which have been used to designate this particular type of pump, but the total effect of his testimony was that the term ROOTS has a definite meaning when applied to pumps and that the term is descriptive of a type of pump and of the engineering principle followed in its construction, and that the term ROOTS is so understood by engineers and technical persons throughout the world. He testified that this knowledge came not only from his experience in the academic environment, but also from his contact with engineers and technical people in industry and business. The Shapiro testimony is believable and persuasive. It came from an entirely disinterested witness of vast knowledge on the subject. The Shapiro testimony is accepted by the Court as correct in fact.

The documentary evidence demonstrates that the word ROOTS has been used for many years to describe this type of pump and its underlying principle in patents, handbooks, texts, reports, articles and monographs; the necessary inference from such use is that the term ROOTS is one which the writers have felt confident would convey a definite meaning to their readers. The invitations to bid demonstrate that buyers in the market for which the parties are competing understand the term ROOTS to signify what defendant says it does. Plaintiff's own Dresser Vacuum di-

vision has used the term "Roots type" in the same manner defendant has, a manner which plaintiff now contends is meaningless. Professor Shapiro's testimony, together with the documentary evidence offered by the defendant, establish the validity of its contention that Roots, when used in the context of fluid handling equipment, is a term of generic significance.

The matter of secondary meaning, although distinct from that of genericality, is nevertheless governed by the same considerations. The doctrine of secondary meaning is applied where terms, incapable originally of registration as trademarks in their primary sense because of descriptiveness or genericality, can become registrable by virtue of their having acquired a secondary meaning which designates in the minds of the buyers the source of the goods as well as their type. The question to be answered in this instance is the same as that in the instance of genericality:—"What do the buyers understand by the word for whose use the parties are contending?" The portions of this opinion which discuss the evidence relating to genericality are here apposite, and what was said there is equally applicable here; it is sufficient here to note that plaintiff has not met its burden of establishing a secondary meaning for the term ROOTS.

Plaintiff contends that where a trademark is used on a variety of different products, it cannot become generic as to any one product, even though that one product was subject to patent protection. This contention is supported by decisions in cases where, as in the case at bar, defendant had raised the issue of genericality to overcome plaintiff's allegations of infringement. However, this contention is based on a conclusion which follows accidentally, but not necessarily, from the factual premises of plaintiff's authorities. In *Telechron, Inc.* v. *Telicon Corp.*, 97 F. Supp. 131

(D. Del. 1951), aff'd., 198 F. 2d 903, (3d Cir. 1952), defendant sought to extend the genericality which TELECHRON allegedly had acquired as a name for a certain type of electric clocks (on which plaintiff had had patent protection) to cover plaintiff's entire product line so that defendant's TELICON would not be infringing as applied to radios. The Court of Appeals, however, noted that the record disclosed that "neither during the life of the basic Warren patents nor thereafter did 'Telechron' become the name of any article of commerce." 197 F. 2d at 907, and rejected defendant's attempted extension of the *Singer* doctrine. In *Enders Razor Co.* v. *Christy Co.*, 85 F. 2d 195 (6th Cir. 1936), KEEN KUTTER had been used by plaintiff as a trademark for its line of bladed products for some forty years *before* it was issued patents on safety razors which it also marketed under the name KEEN KUTTER. The Court of Appeals rejected the application of the *Singer* doctrine, declaring:

> "In addition to the circumstances that 'Keen Kutter' is a trade name constituting part of a trade-mark applied to numerous articles, the name was used many years before the patents were obtained. Under these circumstances, the mark or name does not become public property upon the expiration of the patent rights especially where, as here, the patents did not contribute greatly to the value of the trade mark." 85 F. 2d 198.

Thus *Telechron* and *Enders Razor* while containing language favorable to plaintiff's position, are insufficient, on their facts, to dissuade this Court from finding, upon the evidence in this case, that ROOTS is a word of generic significance, merely descriptive of a type of vacuum pump and its underlying principle. The word ROOTS in this context is incapable, under the *Singer* doctrine and under statutory law, of registration as a trademark. This being so, there is no basis for plaintiff's action for trademark

infringement as set forth in the first count of the complaint, and as to such action, the complaint must be dismissed.

At the end of the trial in this case, I came to the conclusion that plaintiff had failed to prove a case on which relief could be granted. Upon due reflection, after consideration of the oral arguments and briefs of counsel, this conclusion is adhered to.

This opinion is regarded as containing the findings of fact and conclusions of law on which the decision is based as permitted in Rule 52. But in summary and for clarity and specificity, the basic conclusions of law should be stated. They are:

1. The word "Roots" in designation of pumps, blowers, compressors, or the like, incorporating the design or principle referred to in Patent No. 2369 is in the public domain, and the plaintiff does not have any rights of *trade mark* or of *trade name* in said word *per se. 2.* The word "Roots" is free for use in the trade by defendant in sales promotion when it identifies said equipment provided said word "Roots" is further characterized, or used in an association, to show that it is the product of a specific supplier other than plaintiff's division "Roots Connersville." *3.* The defendant may rightfully use and has so used said word "Roots" in the *publici juris* manner and form and has acted in accordance with this conclusion.

Therefore, these conclusions require a further conclusion that there is no infringement as alleged by plaintiff in Count 1 of the complaint. It follows also from the three conclusions just stated that plaintiff has failed to prove a case of federal unfair competition or common law unfair competition. Conclusions *2* and *3* permit defendant to continue to do what it has been doing. The word "Roots" being in the public domain coupled with the method of ad-

vertising heretofore practiced by defendant, no confusion results. The complaint must be dismissed.

The allegations of the counterclaim require discussion and decision.

In the counterclaim defendant alleges that the renewal of the registration of trademark number 153,840, and the registrations of trademarks numbers 710,549 and 724,195 [Appendix "B", Nos. 1, 5 and 6] were falsely and fraudulently obtained by plaintiff and that plaintiff has used these registrations to limit the use of the word ROOTS to itself and thus has interfered, or has conspired with others to interfere with and restrain free commerce and competition. Defendant seeks cancellation of these trademark registrations under 15 U.S.C. 1119 and damages for false registration under 15 U.S.C. § 1120 and treble damages for monopolizing trade and commerce under 15 U.S.C. §§ 2 and 15.

With respect to the cancellation of registrations, the pertinent statute provides:

> "In any action involving a registered mark the court may determine the right to registration, order the cancellation of registrations, in whole or in part, . . . and otherwise rectify the register with respect to the registrations of any party to the action." 15 U.S.C. § 1119.

This Court has held that "Roots" as applied to rotary positive displacement lobe type pumps is a word of generic significance; hence, insofar as plaintiff's registrations of the word "Roots" as a trademark apply to these pumps, the registrations must be cancelled. "Roots", as applied to the rest of plaintiff's product line, has not acquired generic significance; hence, plaintiff's registration of the word "Roots" as a trademark for these latter products is valid. Specifically, trademark registration 153,840

[Appendix "B", No. 1], which relates to "rotary blowers, gas pumps, water pumps and vacuum pumps," and trademark registration 710,549 [Appendix "B", No. 5], which relates to "gas pumps, vacuum pumps, blowers, exhausters, and compressors," must be cancelled insofar as they relate to rotary positive displacement lobe-type pumps, blowers and compressors. These are products in which the parties are in competition; but with respect to plaintiff's other products, the trademarks may stand as presumptively valid, as there is no issue for this Court to adjudicate in that respect. What we have said here applies to Trademark registration number 724,195, which is the trademark registration for "rotary positive displacement gas meters," made by plaintiff.

In its counterclaim, defendant also seeks monetary damages for plaintiff's alleged fraudulent procurement of trademark registrations numbers 710,549 and 724,195 [Appendix "B", Nos 5 and 6] and alleged fraudulent renewal of trademark registration number 153,840 [Appendix "B", No. 1]; and for plaintiff's alleged interference with commerce and trade by using these registrations, once obtained, to prevent defendant from employing the word "Roots" with respect to its goods. Defendant contends that trademark registration number 153,840 had been abandoned before 1962, that plaintiff nevertheless applied for and obtained renewal of its registration, and that plaintiff thereupon relied upon this renewal in applying for the last two registrations.

With respect to defendant's claims for damages arising from plaintiff's alleged fraudulent registration of trademarks and from plaintiff's interference with trade and commerce, it is clear that no claim is made out upon which relief can be granted. There is nothing in the evidence

which indicates that plaintiff relied upon trademark registration number 153,840 to prevent defendant or others from the use of the word Roots, until after the inception of this suit, when plaintiff began citing it along with the other two registrations in attempting to police its trademarks. In connection with the other two registrations, it is to be noted that the mere assertion of genericality by an infringer does not ipso facto terminate a trademark owner's rights to the mark. Plaintiff has denied from the outset that the word ROOTS is generic; defendant has not shown that this denial was not in good faith. Nor has defendant shown that plaintiff's attempts to prevent others from using the word Roots has been other than a good-faith policing of its trademarks. For these reasons, defendant's counterclaim must be, except with respect to the cancellation of plaintiff's trademark registrations heretofore discussed, dismissed.

IT IS SO ORDERED.

(41) ORDER

This cause came on for trial and the Court having heard the evidence and considered the contentions of the parties, it is hereby Ordered, Adjudged and Decreed as follows:

1. The Complaint herein is dismissed.

2. With respect to the Counterclaim:

   a. The plaintiff's trademark registration 153,840 and 710,549 are hereby cancelled insofar as they relate to rotary positive displacement lobe type pumps, blowers and compressors.

   b. The remainder of the Counterclaim is dismissed.

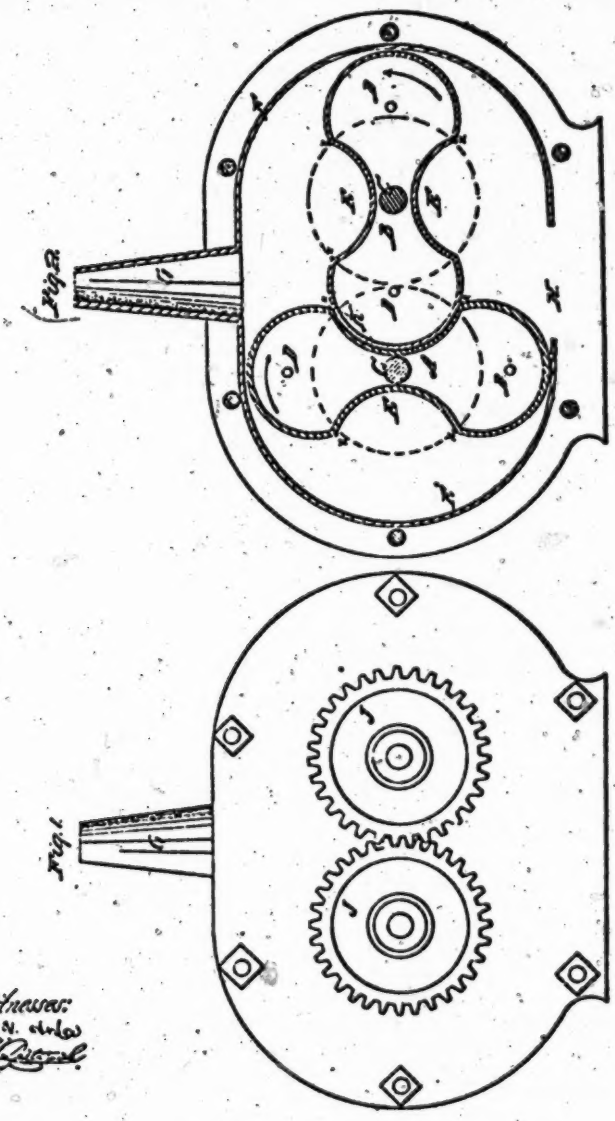
3. The defendant is awarded the costs of this action.

Joseph P. Willson,
United States District Judge.

Dated: February 13, 1967.

P. H. Roots,
Rotary Blower,

No. 30,157. Patented Sep. 25, 1860.



Witnesses:
Chas. N. Chadwick
C. E. Prescott

Inventor:
P. H. Roots
by Munn & Co
Attorneys

Sheet 2-2 Sheets.

P. H. Roots,

Rotary Blower,

No. 30,157. Patented Sept. 25, 1860.

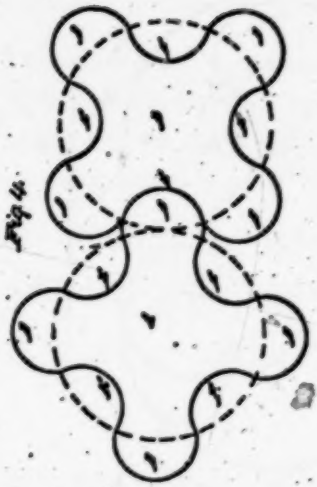


Fig. 1.

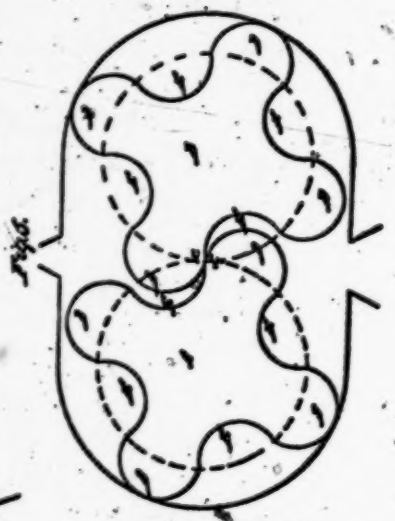


Fig. 2.

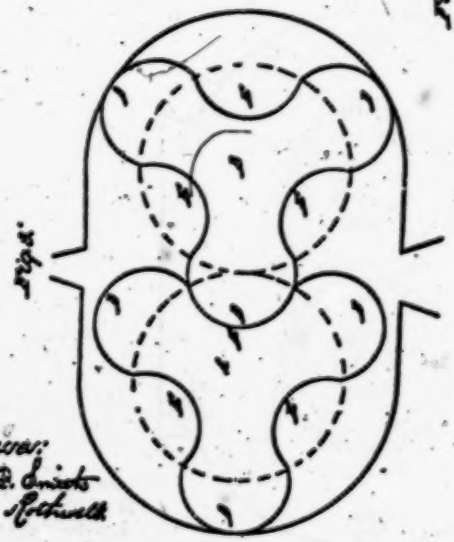


Fig. 3.

Witnesses:
Chas. D. Smith
Wm. H. Rothwell

Inventor:
P. H. Roots
By Munn & Co
Atty.

REGISTER

UNITED STATES PATENT OFFICE.

P. H. ROOTS, OF CONNERSVILLE, INDIANA.

BLOWER.

Specification of Letters Patent No. 30,157, dated September 25, 1860.

To all whom it may concern:

Be it known that I, P. H. ROOTS, of Connersville, in the county of Fayette and State of Indiana, have invented a new and useful Improvement in Rotary Blowers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1. represents a side view, and Fig. 2. a central vertical section.

Similar letters of reference, in each of the several figures, indicate corresponding parts.

The nature of my invention consists in the combination with two pistons which form ares of circles and each inclose one quarter the circumference of a given circle, of two recesses which form quadrants of true circles, when each of said recesses occupy just one quarter of the circumference of the said given circle, as hereinafter described. By this combination of pistons and recesses constructed as described but four small essential points of contact during the revolution of the pistons are experienced, and therefore at these points, narrow packing strips can availably be employed for rendering the pistons air-tight, during the time that the vacuum is being formed, and these come into play periodically and successively or at the moment when one erases its contact another supplies its place.

It is a very essential thing to have the points of positive contact located, for the machine when first made, if employed as a rotary pump can be run for some time without packing and when the parts have worn so as not to be sufficiently tight, the points of contact can be restored and the machine rendered as tight, as when first used, and thus the loss and expense attending the construction of new pistons or the bringing of the parts closer together, obviated. In this particular, my machine differs from all others that I am familiar with and especially from David M. Walker's pump, patented in 1835, whereas, with the combination of pistons and recesses constructed as Mr. David M. Walker describes in the patent granted to him in 1835 on a hydrant pump, the points of contact are continually changing, while the piston is making its movement through the curved recess and therefore it is impossible to availably employ strips of packing at any certain points, and this being so his machine certainly could not be used effectively as a blower, it being essentially important in order to have a machine of this character operate effectively for the blowing of air to pack the pistons air-tight, for if they are not packed air-tight, the effective action of the air will be lost to a great degree by reason of its escape between the abutments.

To enable others, skilled in the art, to make and use my invention, I will proceed to describe its construction and operation.

A, and B, represent two double acting rotating abutments made alike in all respects.

C, C, are their shafts.

D, D, D, D, are pistons which are all alike.

E, E, E, E, are the recesses which receive the pistons and are all alike.

F, F, is a concave or case extending around so as just to clear the pistons as they revolve.

H, and G, are the induction and discharge openings, both of which may be made of a size adapted to the uses to which the machine is to be applied.

The pistons D, D, D, D, and recesses E, E, E, E, are ares of circles and have one common radius, which radius is the chord of an arc of one-eighth the circumference of the circle on which they are formed, shown by the dotted circle in Fig. 2.

The abutments A, and B, are made to revolve simultaneously by means of two equal cog wheels J, J, upon the shafts C, C, of the abutments, as seen in Fig. 1. In order to have the parts operate very tightly, as in the case of a blower, suitable metallic or other packing is to be inserted in the piston at the points *x*, *x*, said points being the only ones of positive contact which are experienced during the revolution of the abutments.

When very dense fluids are operated, it will be desirable to remove so much of each of the pistons as represented in red at K, as will allow the free escape of the fluids as the pistons enter the recesses. The same arrangement will be useful for high velocities, when the fluids are not very dense, for when a dense fluid is suddenly forced out of the recess, a concussion is the result similar to striking upon a solid substance, whereas by allowing a sufficient outlet, all such concus-

sion is avoided, and the fluid escapes at such reduced velocity through the enlarged opening, that the operation is easy.

If, as a blower machine of operating size is run at a velocity of 300 or 400 revolutions per minute, a distinct sound can be heard as the air is forced from the recesses, in a blower, it will therefore be useful, as considerable motive power would be saved thereby.

The operation is as follows: When the pistons are made to revolve in the direction of the arrows, the air or water or whatever fluid is acted upon, will be carried forward as the pistons approach together, and is forced through the discharge pipe G, and as the pistons fill the recesses there can be no backward escapement. In this manner, the device will act as a blower or pump.

It is evident that by reversing the operation and acting upon the pistons by steam or water, the device becomes a rotary steam engine or a pressure water wheel.

As the peripheries of all the internal parts are in perfect circles, either convex or concave, it will be comparatively easy to construct them with accuracy.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the pistons D, D, and recesses E, E, when so constructed as to present but four essential points, of positive contact as described and for the purposes set forth.

P. H. ROOTS.

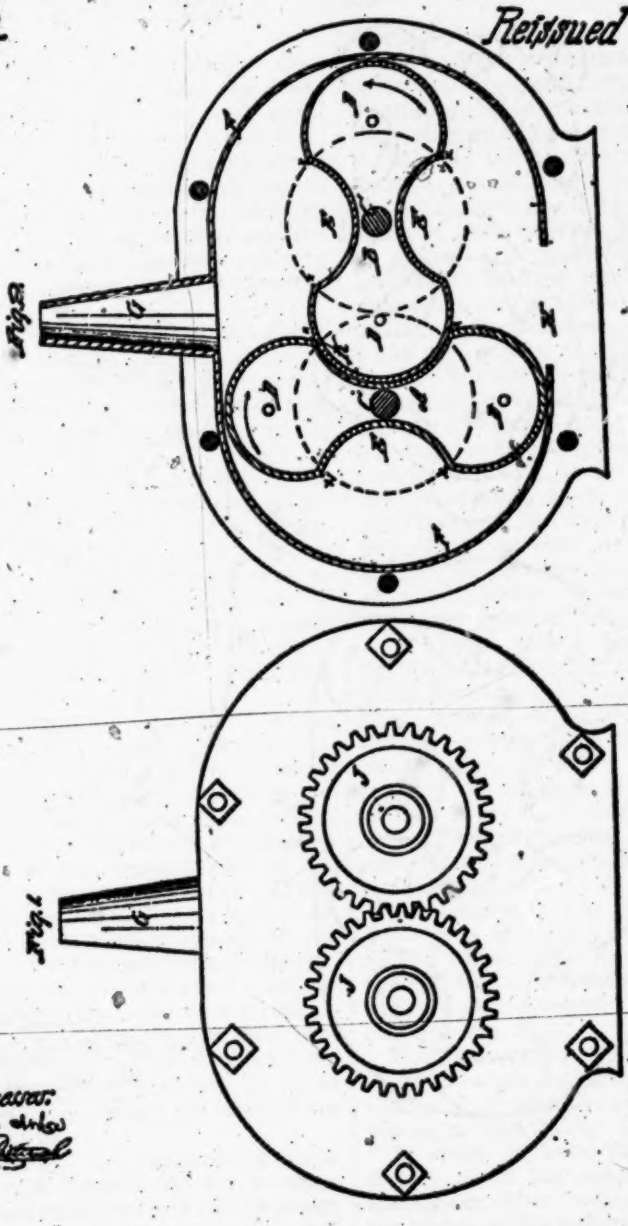
Witnesses:
C. B. Edwards,
Saml. Enyart.

Sheet 1-2 Sheets

P. H. Roots,

Rotary Blower,

No. 2,369. Reissued Oct. 2 1866.



Witnesses:
Louis W. Clarke
C. E. Mitchell

Inventor:
P. H. Roots
Mitchell & Co
Attorneys

APPENDIX "A"

Sheet 2-2 Sheets.

P. H. Roots,

Rotary Blower,

No. 2,369. Reissued Oct. 2, 1866.

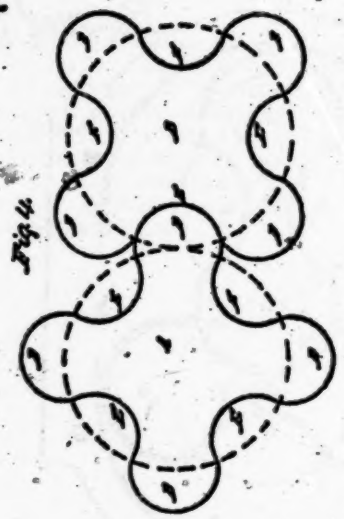


Fig. 1.

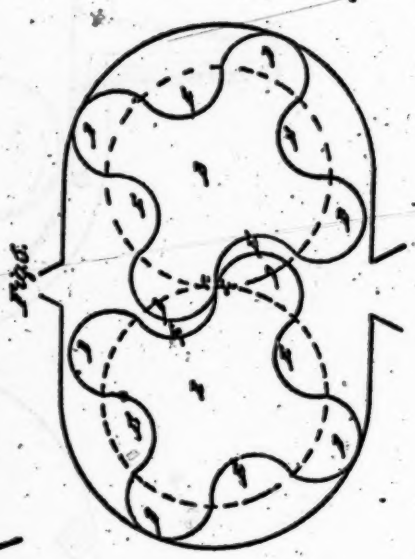


Fig. 2.

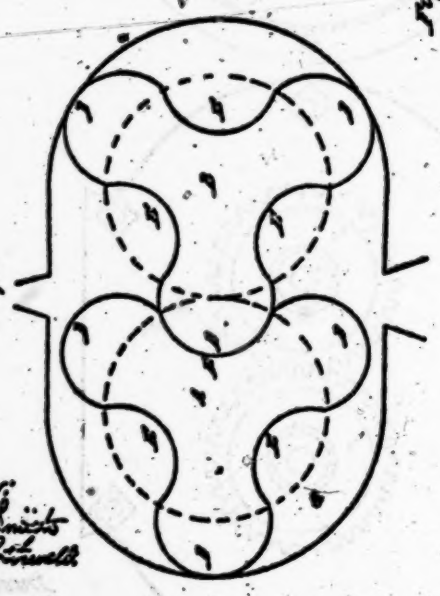


Fig. 3.

Witnesses:
Chas. D. Smith
Geo. H. Rowell

Inventor:
P. H. Roots
By Munn & Co
Attys.

APPENDIX "A"

UNITED STATES PATENT OFFICE.

P. H. ROOTS, OF CONNERSVILLE, INDIANA.

IMPROVEMENT IN BLOWERS.

Specification forming part of Letters Patent No. 30,157, dated September 25, 1860; Reissue No. 2,369, dated October 2, 1866.

To all whom it may concern:

Be it known that I, P. H. ROOTS, of Connersville, in the county of Fayette and State of Indiana, have invented a new and useful Improvement in Rotary Blowers; and I do hereby declare that the following is a full, clear, and exact description of the same, sufficient to enable any one skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a side view, and Fig. 2 a central vertical section. Figs. 3, 4, and 5 are diagrams illustrating the construction and operation of the apparatus, with three or four pistons and a corresponding number of recesses on each abutment.

Similar letters of reference in each of the several figures indicate corresponding parts.

The subject of my invention is a rotary-blower pump or engine consisting of coacting rotary abutments, each provided with two or more pistons and a corresponding number of recesses, which pistons and recesses constitute, respectively, convex and concave arcs of equal radius, as will be hereinafter described.

To illustrate my invention, I will first describe it as represented in Figs. 1 and 2, where each rotary abutment consists of two pistons, which form arcs of circles, and each inclose one-quarter the circumference of a given circle, and of two recesses, which form arcs of equal radius with the pistons, and also occupy each one-quarter of the circumference of the said given circle. By this combination of pistons and recesses, constructed as described, but four small essential points of contact during the revolution of the pistons are experienced, and therefore at these points narrow packing-strips can availably be employed for rendering the pistons air-tight during the time that the vacuum is being formed, and these come into play periodically and successively, or at the moment when one ceases its contact another supplies its place.

It is a very essential thing to have the points of positive contact located, for the machine when first made, if employed as a rotary pump, can be run for some time without packing, and when the parts have worn so as not to be sufficiently tight the points of contact can be restored and the machine rendered air-tight, as when first used, and thus the loss and expense attending the construction of new pistons or the bringing of the parts closer together obviated. In this particular my machine differs from all others that I am familiar with, and especially from David M. Walker's pump, patented in 1835, whereas, with the combination of pistons and recesses constructed as Mr. David M. Walker describes in the patent granted to him in 1835 on a hydrant-pump the points of contact are continually changing while the piston is making its movement through the curved recess, and therefore it is impossible to availably employ strips of packing at any certain points; and this being so, his machine certainly could not be used effectively as a blower, it being essentially important, in order to have a machine of this character operate effectively for the blowing of air, to pack the pistons air-tight, for if they are not packed air-tight the effective action of the air will be lost to a great degree by reason of its escape between the abutments.

In Figs. 1 and 2, A and B represent two double-acting rotating abutments, made alike in all respects. C C are their shafts. D D D D are pistons, which are all alike. E E E E are the recesses which receive the pistons, and are all alike. F F is a concave or case extending around so as just to clear the pistons as they revolve. H and G are the induction and discharge openings, both of which may be made of a size adapted to the uses to which the machine is to be applied.

The pistons D D D D and recesses E E E E are arcs of circles, and have one common radius, which radius is the chord of an arc of one-eighth the circumference of the circle on which they are formed. (Shown by the dotted circle in Fig. 2.)

The abutments A and B are made to revolve simultaneously by means of two equal cog-wheels, J J, upon the shafts C C of the abutments, as seen in Fig. 1.

In order to have the parts operate very tightly, as in the case of a blower, suitable metallic or other packing is to be inserted in the piston at the points X X, said points being the only ones of positive contact which are

experienced during the revolution of the abutments. When very dense fluids are operated it will be desirable to remove so much of each of the pistons, as represented in red at K, as will allow the free escape of the fluids as the pistons enter the recesses. The same arrangement will be useful for high velocities, when the fluids are not very dense; for when a dense fluid is suddenly forced out of the recess a concussion is the result, similar to striking upon a solid substance, whereas, by allowing a sufficient outlet, all such concussion is avoided, and the fluid escapes at such reduced velocity through the enlarged opening that the operation is easy.

If, as a blower, a machine of operating size is run at a velocity of three hundred or four hundred revolutions per minute, a distinct sound can be heard as the air is forced from the recesses in a blower; it will, therefore, be useful, as considerable motive power would be saved thereby.

Figs. 3 and 4 illustrate the mode of forming the abutments with more than two pistons and two recesses each. If, instead of taking the chord of an eighth part of the circle as the radius, as shown in Figs. 1 and 2, the chord of the twelfth part be taken as the radius with which to describe the arcs of the pistons and recesses, an abutment with three pistons and three recesses will be produced, as illustrated in Fig. 3, the centers for describing both being, as before, in the circumference of the circles. Again, if the chord of one-sixteenth part of the circle be taken as the radius for describing the pistons and recesses, their centers being, as before, in the peripheries of the circles, then abutments are formed, each having four pistons and four recesses, as shown in Figs. 4 and 5. The principle of the pistons entering and passing the recesses is the same in all these cases.

Fig. 5 illustrates, at *x x*, the passing of the points of positive contact, at which points the packing may be applied, as before explained. In Figs. 1 and 2 there are four such points of contact; in Fig. 3, six, and, in Figs. 4 and 5, eight.

The operation is as follows: When the pistons are made to revolve in the direction of the arrows the air or water, or whatever fluid is acted upon, will be carried forward as the pistons approach together, and is forced through the discharge-pipe G; and, as the pistons fill the recesses, there can be no backward escapement. In this manner the device will act as a blower or pump.

It is evident that by reversing the operation and acting upon the pistons by steam or water the device becomes a rotary steam-engine or a pressure-water-wheel.

As the peripheries of all the internal parts are in perfect circles, either convex or concave, it will be comparatively easy to construct them with accuracy.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The coacting rotary abutments A B, each consisting of two or more pistons, D D, and two or more recesses, E E, which are arcs of true circles and formed with equal radii, substantially as set forth.

To the above specification of my improved blower I have signed my hand this 12th day of September, 1866.

P. H. ROOTS.

Witnesses:
GEO. W. ROTHWELL,
JAS. L. EWIN.

TRADEMARKS OF ROOTS-CONNERSVILLE AND PREDECESSORS

	Mark	Number	Date of Issue	First Use	Last Use
			REGISTERED		
1.		153,840	Mar. 28, 1922 Reissue 1942 Reissue 1962	1859	1950
2.		617,425	Dec. 13, 1955	1955	current
3.	ROOTS-CONNERSVILLE	632,648	Aug. 14, 1956	1947	1960
4.	ROOTS-CONNERSVILLE	665,972	Aug. 19, 1958	1935	1960
5.	ROOTS	710,549	Jan. 31, 1961	1960	current
6.	ROOTS	724,195	Nov. 21, 1961	1960	current
			NON-REGISTERED		
7.				1935	1955

APPENDIX "B"

APPENDIX B

OPINION OF COURT OF APPEALS FOR THE THIRD CIRCUIT
(Filed May 24, 1968)

Before MARIS, KALODNER and SEITZ, *Circuit Judges*.

By MARIS, *Circuit Judge*.

These are appeals from a judgment entered in the Western District of Pennsylvania in an action brought by the plaintiff, Dresser Industries, Inc., a corporation engaged in the manufacture and sale of, inter alia, rotary positive displacement lobe-type vacuum pumps, blowers and compressors, to enjoin the defendant, Heraeus Engelhard Vacuum, Inc., a corporation selling similar products manufactured in Hanau, Germany, by the defendant's parent corporation, W. C. Heraeus, GmbH, from using the trademark "Roots" in catalogues and trade journal advertising in the United States. Judge Willson, in a careful and exhaustive opinion, set out the charges and countercharges of the pleadings, as well as the corporate history of the parties, and the history of the 1860[1] patent issued to P. H. Roots on an improvement in rotary blowers, and made comprehensive findings covering the factual issues. No useful purpose would be served in repeating here what has been so well and fully stated by him, Dresser Industries, Inc. v. Heraeus Engelhard Vacuum, Inc., D.C. Pa. 1967, 267 F. Supp. 963.

[1] Letters Patent No. 30157 issued under date of September 25, 1860, and reissued under date of October 2, 1866, Reissue No. 2369, and the designs of the rotary blower are set out in Appendix A to the opinion of the district court, 267 F. Supp. pp. 976-984.

For this review it is sufficient to say that the design disclosed in the P. H. Roots 1860-1866 patent generated considerable interest in engineering and industrial circles, abroad as well as in this country, winning high awards in exhibitions held in 1867, 1873 and 1876. That design principle has retained its appeal to the present time. Since 1859 rotary air blowers and related products were manufactured and sold by the plaintiff's predecessors, P. H. & F. M. Roots Company and succeeding predecessors in interest, and are now manufactured and sold by the plaintiff through its Roots-Connersville division. In 1955 Heraeus began to sell through a distributor in the United States its rotary positive displacement pumps. In 1963 the defendant was formed to sell these products. During this period the plaintiff protested, to Heraeus' agent and later to the defendant, the use of the word "Roots" in advertising "Roots pumps", "Roots blowers" and "Heraeus Roots Pump".[2]

The goods with which the parties compete in the market in this country are rotary positive displacement lobe-type vacuum pumps. At least half a dozen major companies manufacture and sell this type pump. The defendant's products range in price from about $1,300 to $25,000 and up; competitive bidding accounts for a good percentage of the purchases from the parties. The pumps are often sold as a result of an inquiry or a direct order from a prospective user. The market is relatively small and selective, the purchasing being made sometimes through customers' purchasing agents but, generally, on the basis of specifications drafted by the customers' engineers for use in installations which are large and expensive. In these sales advertising may play a significant role and the descriptive words used are often of paramount importance. Invitations to bid

[2] The word "Roots" was not affixed to any of the defendant's products sold in this country or to the wrappings.

indicated that the prospective purchasers, among whom were the National Bureau of Standards, the United States Air Force, Grumman Aircraft Engineering Corporation and the General Electric Company, specified "Roots-type", "Roots", "roots", or "Roots type" pumps. In this context it was of considerable importance to the plaintiff, on the one hand, to restrict the use of the word "Roots" to its own products, and to the defendant, on the other, to be free to use the word "Roots" with respect to advertising its products.

The complaint charged that the use by the defendant of the trademark "Roots" being identical to the plaintiff's trademark "Roots" and substantially identical to salient portions of the plaintiff's five other trademarks,[3] wrongfully identified and represented the defendant's pumps as originating from the plaintiff and was likely to cause confusion, deception or mistake in the minds of the purchasing public as to the origin or relationship of the defendant's products, in violation of section 32 of the Trademark Act of 1946, as amended, 15 U.S.C.A. § 1114(1), and constituted unfair competition for which plaintiff demanded an accounting and damages. The defendant by way of defense asserted that the designation "Roots", since at least 1900, has been in the public domain, widely used in the art to identify either an engineering principle or a type of equipment embodying that principle, and has become generic with respect to identifying that type of equipment. In a counterclaim the defendant charged the plaintiff with fraud in obtaining its trademark registrations and with unfair competition and illegal restraint and sought a judgment dismissing the complaint, cancelling the plaintiff's trademark registrations, and damages.

[3] The plaintiff's registered trademarks are set out in Appendix B to the opinion of the district court. 267 F. Supp. p. 984.

Following the trial of the case, the district court concluded that the word "Roots", as applied to rotary positive displacement lobe-type pumps, blowers and compressors which embodied the design or principle disclosed in Patent Reissue No. 2369, was a word of generic significance; that the plaintiff did not have any rights of trademark or tradename in the word per se; that the word "Roots" was free for use in the trade by the defendant in its sales promotion, providing the defendant in using the word "Roots" did so in such a manner as to show that its goods were the products of a specific supplier other than plaintiff's Roots-Connersville division. The court accordingly dismissed the complaint. With respect to the defendant's counterclaim, the court ordered cancellation of the plaintiff's Trademark Registration Nos. 153,840 and 710,549, insofar as they related to rotary positive displacement lobe-type pumps, blowers and compressors, dismissed the remainder of the counterclaim and awarded the defendant costs of the action. Judgment was entered accordingly and these appeals followed. The plaintiff, at our docket No. 16566, appeals from all portions of the judgment excepting that portion dismissing the remainder of the counterclaim; the defendant, at our docket No. 16567, appeals from that portion of the judgment dismissing its counterclaim.

In deciding cases involving charges that the exclusive use of a trademark has been invaded, there is no precise formula or rule of law which can be applied mechanically to determine whether there has been an infringement of a trademark or name. Each case must be decided on its own facts and circumstances. Morgenstern Chemical Co. v. G. D. Searle & Co., 3 Cir. 1958, 253 F. 2d 390, 392. As was observed in Q-Tips, Inc. v. Johnson & Johnson, 3 Cir. 1953, 206 F. 2d 144, 145, "when the final outcome on a given set of facts may vary, not with the legal concepts involved, but

their application to particular states of fact, the pattern is inevitably less clear than in cases where a definite rule is to be applied." How a particular word has been used and how it has been understood by the public or the trade is a question of fact. Telechron, Inc. v. Telicon Corp., 3 Cir. 1952, 198 F. 2d 903, 907.

The function of a trademark is to identify the origin or ownership of the article; the essence of the wrong is the passing off of the goods of one manufacturer or vendor as those of another. Canal Company v. Clark, 1871, 80 U.S. 311, 322; Trade-Mark Cases, 1879, 100 U.S. 82, 92; G. & C. Merriam Co. v. Saalfield, 6 Cir. 1912, 198 F. 369, 372; Restatement, Torts, §§ 711, 712. The right of the plaintiff must be based upon a wrong which the defendant has done to it by misleading customers as to the origin of the goods sold, thus taking away its trade. Such a right is not founded on a bare title to a word or symbol but on a cause of action to prevent deception. Dupont Cellophane Co. v. Waxed Products Co., 2 Cir. 1936, 85 F. 2d 75, 81. In this respect, the common law of trademarks is but a part of the broader law of unfair competition. Hanover Milling Co. v. Metcalf, 1916, 240 U.S. 403, 412-413.

This court in Gum v. Gumakers of America, 1943, 136 F. 2d 957, 958, observed: "Aside from the prohibition against infringing a patent, copyright or trade mark and except for the requirement . . . that he must identify his product as his own, any one has the right to manufacture and sell a product similar or even identical in appearance to the original product with which it competes unless the original product has become associated in the public mind with its producer." That a surname, by virtue of actual and exclusive use, may be registered as a trademark is clear. Trade-Mark Act of 1946, § 2, 15 U.S.C.A. § 1052;

Restatement, Torts, § 716; Thaddeus Davids Co. v. Davids, 1914, 233 U.S. 461, 468. But where during the life of a monopoly created by a patent, a name, whether it be arbitrary or be that of the inventor, has become by his consent, either express or tacit, the identifying and generic name of the thing patented, the name passed to the public with the cessation of the monoply which the patent created subject to the duty imposed upon the one using the patent and the name not to pass his goods off as the goods of the originator. Singer Manufacturing Co. v. June Manufacturing Co., 1896, 163 U.S. 169; Restatement, Torts, §§ 721, 727, 735. To that end, the law has required that the article be so marked with the maker's name or otherwise as to prevent confusion or deception. Yale & Towne Mfg. Co. v. Ford, 3 Cir. 1913, 203 F. 707, 709-710. However, whether a name has come to indicate the invention and constitutes its generic description is one of fact, to be proved by the evidence. President Suspender Co. v. MacWilliam, 2 Cir. 1916, 238 F. 159, 163; Ross-Whitney Corp. v. Smith Kline & French Lab., 9 Cir. 1953, 207 F. 2d 190, 194-195.

It has been said that the law is not made for the protection of experts but for the public—that vast multitude, which includes the ignorant, the unthinking and the credulous, who, in making purchases, do not stop to analyze but are governed by appearances and general impressions. Florence Mfg. Co. v. J. C. Dowd & Co., 2 Cir. 1910, 178 F. 73, 75; J. N. Collins Co. v. F. M. Paist Co., D.C. Pa. 1926, 14 F. 2d 614, 615-616; Baker v. Master Printers Union of New Jersey, D.C. N.J. 1940, 34 F. Supp. 808, 810-811; Stork Restaurant v. Sahati, 9 Cir. 1948, 166 F. 2d 348, 359; Plough, Inc. v. Kreis Laboratories, 9 Cir. 1963, 314 F. 2d 635, 645; 3 Callmann, Unfair Competition and Trade-Marks, 2d ed. § 81.2. This is not to say that trademark rights of manufacturers or vendors selling to experts are unprotected but

the general principles of law are applied in the light of the character of the article, the use to which it is put, the manner in which it is purchased, and the kind of people who ask for it. Whether the class of buyers is sophisticated is a matter of importance in deciding the question of probable confusion. Pyle Nat. Co. v. Oliver Electric Mfg. Co., 8 Cir. 1922, 281 F. 632, 635; Everlasting Valve Co. v. Schiller, D.C. Pa. 1927, 21 F. 2d 641, 643. But the mere fact that those ordering a product may be discriminating technicians does not of itself insure against the likelihood of confusion; being skilled in one's own art will not necessarily preclude confusion if the similarity between the marks is too great. Compare, Bayer Co. v. United Drug Co., D.C.N.Y. 1921, 272 F. 505 (defendant enjoined from using the trademark "Aspirin" in sales to chemists, physicians or retail druggists but allowed to sell under that name direct to consumers because as to them the word meant the article and not the source of manufacture); Morgenstern Chemical Co. v. G. D. Searle & Co., 3 Cir. 1958, 253 F. 2d 390 (Mictine dispensed only on physicians' prescriptions was confusingly similar to Micturin which was also dispensed on physicians' prescriptions but was for an entirely different ailment); Wincharger Corporation v. Rinco, Inc., C.C.P.A. 1962, 297 F. 2d 261 (power supply equipment); Marks v. Polaroid Corporation, D.C. Mass. 1955, 129 F. Supp. 243, 273, aff. 237 F. 2d 428 (sale to motion picture distributors). As a basis for any relief, the plaintiff must prove that the buying public is likely to confuse the goods of the plaintiff and defendant, which is a question of fact for the district court to decide. John R. Thompson Co. v. Holloway, 5 Cir. 1966, 366 F. 2d 108, 113.

With these principles in mind we turn to the plaintiff's contentions on its appeal. Many points are raised and argued at length but these boil down to purely questions of

fact. The first issue raised by the pleadings was whether the plaintiff had a trademark for which it was entitled to legal protection in the use of the name "Roots" to designate its pumps, blowers and compressors incorporating the principle disclosed in Roots' Patent No. 2369. This the district court answered in the negative. The second issue raised was whether the use of "Roots" by the defendant in advertising Heraeus' pumps operated as a palming off of the defendant's goods as those of the plaintiff or was likely to cause confusion in the minds of the consuming public. This was also answered in the negative.

The plaintiff says that the finding of the district court that "Roots" was generic is clearly erroneous, that the district court erred in failing to find that the defendant's use of "Roots" was likely to cause confusion, deception and mistake, and that the plaintiff's witnesses unequivocally showed that "Roots" is regarded as a trademark, thereby establishing a secondary meaning for that term. The chief attack by the plaintiff on these findings is as to the weight which the trial judge gave to the defendant's expert and documentary evidence. The plaintiff contends that the trial judge should have given more weight to the plaintiff's witnesses and experts as to the meaning of the word "Roots" to the purchasing public and should have answered this question and the question of the likelihood of confusion in the way testified to by those witnesses. The evidence was sharply contradictory and the trial judge did give controlling significance to the defendant's evidence. It is settled law, however, that the question of credibility is peculiarly for the trier of fact. An appellate tribunal will not redetermine the credibility of witnesses where, as here, the trial judge had the opportunity to observe their demeanor and to form a conclusion. Rule 52(a), Federal Rules of Civil Procedure; Graver Mfg. Co. v. Linde Co., 1949, 336 U.S.

271, 274-275; Smith v. McLane, 3 Cir. 1949, 174 F. 2d 819, 821; Q-Tips, Inc. v. Johnson & Johnson, 3 Cir. 1953, 206 F. 2d 144, 147; Marks v. Polaroid Corporation, 1 Cir. 1956, 237 F. 2d 428, 435. Upon a careful review of the record we are constrained to conclude that the findings of the district court are amply supported by the evidence.

With the controversy as to these issues of fact thus resolved, the matter should be ended insofar as plaintiff's appeal is concerned. But the plaintiff contends that the district court erred as a matter of law. To these contentions, therefore, we now turn.

The plaintiff says that the district court erred as a matter of law in its application of the Singer decision to the present facts and that the court misapplied the test of the Bayer Co. case. In this regard the district court stated:

> "Where, during the life of a patent, a name, whether it be arbitrary or that of the inventor, has become the identifying and generic name of the thing patented, this name passes to the public with the expiration of the patent. Singer Mfg. Co. v. June Mfg. Co., 163 U.S. 169, 16 S.Ct. 1002, 41 L. ed. 118. However, the mere expiration of the patent covering the thing patented does not cause the name of the thing to pass, along with the teaching of the patent, into the public domain. The test is whether the name of the patented thing has become generic, that is, whether the name of the patented thing has come to mean primarily what kind of thing it is, rather than that it comes from a single source. The test for deciding whether a name has become a generic title of a product is 'What do the buyers understand by the word for whose use the parties are contending?' Bayer Co. v. United Drug Co., 2 Cir. 272 F. 505." 267 F. Supp. page 969.

The plaintiff's main argument is that it is crucial to the application of the Singer decision that genericness be

proved to exist during the life of the monopoly created by the patent, which in this case would be for the period ending in 1874, and that the documentary evidence introduced by the defendant bearing publication dates preceding 1874 failed to prove that the name had acquired a generic meaning during the life of the Roots patent. The weight to be given the evidence of this nature in the case was for the district court and its findings adequately answer the question of fact raised by the plaintiff whether "Roots" had become of generic significance during the term of the patent. Regardless of this, however, the narrow construction which the plaintiff seeks to place upon the rule laid down in the Singer decision cannot be accepted. Under the particular facts of that case, the Supreme Court decided that the Singer name had become generic as a description of the product patented during the term of the patent and hence the name passed to the public with the expiration of the patent. But we do not read the Singer decision to hold that only because the Singer name had become generic before the expiration of the term of the patent did the name pass into the public domain. The theory underlying the Singer doctrine is stated in the Restatement of Torts, § 735(1), thus: "A designation which is initially a trade-mark or trade name ceases to be such when it comes to be generally understood as a generic or descriptive designation for the type of goods, services or business in connection with which it is used." Comment b thereto further states: "It is not by the expiration of the patent or secret, but by the change of meaning in the market, that such a designation ceases to be a trade-mark under the rule stated in this Section." The nub of the issue is whether a name still indicates exclusively the source or origin of manufacture of goods, not when, in point of time, a designation comes to be generally understood as generic or descriptive. Accordingly, we conclude

that whether "Roots" became a generic designation during the term of the patent or thereafter does not affect the application of the rule of the Singer decision to the facts of this case. It is the ultimate fact which is decisive—namely, that it has in fact become a generic designation.

The Singer decision is likewise said to be inapplicable to this case for the reason that the district court found that through the years the product line of Roots-Connersville has been greatly expanded so that it now manufactures all sorts of air and gas handling equipment—pumps, blowers and exhausters based on various engineering principles, as well as gas meters, and accessories—and is now developing electronic instruments. The plaintiff says this case is governed by the rule stated in Enders Razor Co. v. Christy Co., 6 Cir. 1936, 85 F. 2d 195, and Telechron, Inc. v. Telicon Corp., D.C. Del. 1951, 97 F. Supp. 131, aff'd. 3 Cir. 1952, 198 F. 2d 903, that an arbitrary term applied to an extensive line of products cannot be generic, and that the district court erred in refusing to follow this well established exception to Singer. Judge Willson carefully analyzed those cases, and finding that while language contained therein was favorable to the plaintiff's contention, he concluded that the present case is distinguishable on its facts and he adhered to his finding that, upon the evidence in this case, "Roots" is a word of generic significance which is descriptive of a type of vacuum pump and its underlying principle. We are wholly in accord with this conclusion.

The plaintiff further charges that the district court overlooked the pre-patent use by plaintiff's predecessors of the trade name "Roots" as "Roots Woolen Mills" which preceded the granting of the 1860 patent. We cannot see how this established any special property right in the plaintiff. It has been said that a trademark is not property in

the ordinary sense but only a word or symbol indicating the origin of a commercial product. The owner of the mark acquires the right to prevent the goods to which the mark is applied from being confused with those of others and to prevent his own trade from being diverted to competitors through their use of misleading marks. There are no rights in a trademark beyond these. It cannot be assigned in gross and may only be transferred with a business to identify the merchandise of the owner. Industrial Rayon Corp. v. Dutchess Underwear Corp., 2 Cir. 1937, 92 F. 2d 33, 35; Looz, Inc. v. Ormont, D.C. Cal. 1953, 114 F. Supp, 211, 215. The facts of this case are distinguishable from those of the cases in which a trademark or name on a product antedated the granting of the patent and where it was the name and not the patent which gave particular value to the article. Batcheller v. Thomson, 2 Cir. 1899, 93 F. 660, 665; President Suspender Co. v. MacWilliam, 2 Cir. 1916, 238 F. 159, 163. Certainly the trade name "Roots" designating woolens lent no value to plaintiff's pumps and does not affect the application of Singer to the facts of this case.

The plaintiff also contends that the Singer decision is inapplicable where a patent covers only an improvement on a product previously known for more than 200 years. That pumps were known and long in use is indisputable but it does not appear that the specific teaching disclosed in the Roots patent, the meshing of the pump lobes in a more air-tight fashion, was known or used before the time of issue of the Roots patent. It was this particular design which the district court found was of such great interest in engineering and industrial circles and which became known as the "Roots principle". The defendant contends that a somewhat similar claim was made in the case of Dupont Cellophane Co. v. Waxed Products Co., 2 Cir. 1936, 85 F. 2d 75, 81, and rejected by the court which stated, "Certainly to

some extent at least his patents 'afforded shelter against the competition of others' and brought the case within the Singer decision. Horlick's Food Co. v. Elgin Milkine Co., 120 F. 264, 266 (C.C.A. 7)." We conclude there is no merit in this contention of the plaintiff.

And, finally, the plaintiff says the Singer decision is outmoded and of sharply limited application. We cannot agree. The cases upon which the plaintiff relies to support this contention are distinguishable on their facts and merely apply the rule of the Singer decision that one may not mislead purchasers into believing they are buying Singer machines and may not palm off his goods as those of the Singer Company. Singer Mfg. Co. v. Briley, 5 Cir. 1953, 207 F. 2d 519; Singer Mfg. Co. v. Redlich, D.C. Cal. 1952, 109 F. Supp. 623. We conclude that the district court did not misapply the Singer decision in this case.

The plaintiff next charges that the district court erroneously departed from the established test for genericness stated in the Bayer case, namely: "What do buyers understand by the word for whose use the parties are contending" by adding thereto the phrase "when the word is used in association with one particular product", thereby in effect extending the Singer doctrine by making it applicable to a single product out of a multiple line of products with respect to which the alleged generic term is used. The plaintiff says that in doing so the district court disregarded plaintiff's documentary and oral evidence of decades of multi-product advertising and sales. The plaintiff is here in effect again presenting the argument that since the trademark "Roots" is used on a variety of different products the word "Roots" cannot become generic as to a type of vacuum pump alone. In this case the district court found that the relevant market shared by the parties was rotary positive displacement lobe-type pumps incorporating the

design disclosed in the Roots 1860 patent and that it was only as to pumps incorporating this design that the word had become generic. As we have indicated the court considered the plaintiff's argument in the light of the Telechron and Enders decisions and properly held that they did not rule this case. We have no quarrel with the holding of those cases that an arbitrary name can hardly become generic as applied to all of a wide variety of products of a manufacturer. But this is not to say that such a name may not become generic as to one of those products. Indeed, as Judge Willson found from ample evidence, this is exactly what has happened here. And the fact that the plaintiff's "Roots" pumps include a variety of individual types is not significant in this connection. For, as the court said in the Enders case "the same name as a generic description may apply to various species within the same genus." 85 F. 2d 195, 197.

The plaintiff further contends that the district court misapplied the Bayer test in considering the question of the likelihood of confusion for the reason that all of the plaintiff's products are so closely allied that the record does not support a finding of the isolation of "pumps, blowers, compressors, or the like, incorporating the design or principle referred to in Patent No. 2369" from the spectrum of purchasers in the air and gas handling field. The fallacy of this argument is that it does not meet an important finding of fact supported by the evidence in this case, namely, that these products are not offered to a spectrum of purchasers but to a relatively small and selective market, each purchase being made with reflection and without haste. We conclude that the district court properly applied the test of the Bayer case.

This brings us to the defendant's cross-appeal and its

contention that the district court erred in dismissing that part of its counterclaim seeking damages and attorney's fees. The defendant contends that it proved that the plaintiff had fraudulently obtained trademark registrations well knowing that the word "Roots" was generic and in the public domain and that, therefore, the plaintiff used these trademark rights to exclude the defendant from the market through threats of litigation. The defendant argues that it had established a prima facie case within the meaning of Walker, Inc. v. Food Machinery, 1965, 382 U.S. 172, and Kobe, Inc. v. Dempsey Pump Co., 10 Cir. 1952, 198 F. 2d 416, and was entitled to damages arising from plaintiff's alleged fraudulent registration of trademarks, Trade-Mark Act of 1946, § 38, 15 U.S.C.A. § 1120, and to an award of treble damages, under section 4 of the Clayton Act, 15 U.S.C.A. § 15, for injuries sustained from plaintiff's alleged interference with trade. No useful purpose would be served in repeating what has been so thoroughly considered and well stated by Judge Willson in rejecting these contentions on the ground that the evidence did not support the defendant's claims. 267 F. Supp., pp. 975-976. These are findings of fact which will not be disturbed on appeal.

The judgment of the district court will be in all respects affirmed.

APPENDIX C

I. CASES APPLYING *SINGER* TO HOLD A TRADEMARK GENERIC

1. *Centaur Co.* v. *Heinsfurter*, 84 Fed. 955,959 (8th Cir. 1898);
2. *Centaur Co.* v. *Killenberger*, 87 Fed. 725 (D. N.J. 1898);
3. *Centaur Co.* v. *Neathery*, 91 Fed. 891 (5th Cir. 1898);
4. *Centaur Co.* v. *Marshall*, 92 Fed. 605 (W.D. Mo. 1899);
5. *B. B. Hill Mfg. Co.* v. *Sawyer-Bass Mfg. Co.*, 112 Fed. 144 (E.D. N.Y. 1901);
6. *Holzapfels Compositions Co.* v. *Rahtjens American Composition Co.*, 183 U.S. 1, 12 (1901);
7. *Horlick's Food Co.* v. *Elgin Milkine Co.*, 120 Fed. 264 (7th Cir. 1903);
8. *Warren Featherbone Co.* v. *American Featherbone Co.*, 141 Fed. 513 (7th Cir. 1905);
9. *Ogilvie* v. *G. & C. Merriam Co.*, 149 Fed. 858 (D. Mass.), *aff'd*, 159 Fed. 638 (1st Cir. 1908);
10. *Greene, Tweed & Co.* v. *Manufacturers' Belt Hook Co.*, 158 Fed. 640 (N.D. Ill. 1906);
11. *Sternberg Mfg. Co.* v. *Miller Du Brul & Peters Mfg. Co.*, 161 Fed. 318 (8th Cir. 1908);
12. *Rice-Stix Dry Goods Co.* v. *J. A. Scriven Co.*, 165 Fed. 639 (8th Cir. 1908);
13. *Ludlow Valve Mfg. Co.* v. *Pittsburgh Mfg. Co.*, 166 Fed. 26 (3rd Cir. 1908);
14. *Glaser* v. *St. Elmo Co.*, 175 Fed. 276 (S.D. N.Y. 1909);
15. *A. Y. McDonald & Morrison Mfg. Co.* v. *H. Mueller Mfg. Co.*, 183 Fed. 972 (8th Cir. 1910);

16. *G. C. Merriam Co.* v. *Saalfield,* 190 Fed. 927 (6th Cir. 1911);

17. *Yale & Towne Mfg. Co.* v. *Worcester Mfg. Co.,* 195 Fed. 528 (1st Cir. 1912);

18. *Yale & Towne Mfg. Co.* v. *Restein,* 196 Fed. 176 (E.D. Pa. 1912);

19. *Bristol Co.* v. *Graham,* 199 Fed. 412 (8th Cir. 1912);

20. *DeLong Hook & Eye Co.* v. *American Pin Co.,* 200 Fed. 66 (S.D. N.Y. 1912);

21. *Yale & Towne Mfg. Co.* v. *Ford,* 203 Fed. 707, 709 (3rd Cir. 1913);

22. *Frank W. Whitcher Co.* v. *Sneierson,* 205 Fed. 767 (D. Mass. 1913);

23. *National Lock Washer Co.* v. *Hobbs. Mfg. Co.,* 210 Fed. 516 (D. Mass. 1914);

24. *Jenkins Bros.* v. *Kelly & Jones Co.,* 212 Fed. 328 (W.D. Pa. 1914);

25. *Jenkins Bros.* v. *Kelly & Jones Co.,* 227 Fed. 211 (3rd Cir. 1915);

26. *American Specialty Co.* v. *Collis Co.,* 235 Fed. 929 (S.D. Iowa 1916);

27. *William H. Keller Inc.* v. *Chicago Pneumatic Tool Co.,* 298 Fed. 52 (7th Cir. 1923);

28. *Vibroplex Co.* v. *J. H. Bunnell & Co.,* 13 F.2d 528 (S.D. N.Y. 1926);

29. *Walworth Co.* v. *Moore Drop Forging Co.,* 19 F.2d 496 (1st Cir. 1927);

30. In re *Autographic Register Co.,* 39 F.2d 718 (C.C.P.A. 1930);

31. *Collis Co.* v. *Consolidated Machine Tool Corp.,* 41 F.2d 641 (8th Cir. 1930);

32. *Amiesite Asphalt of America* v. *Interstate Amiesite Co.,* 4 F. Supp. 504 (D. Del. 1933) *aff'd.,* 72 F.2d (3rd Cir. 1934);

33. *DuPont Cellophane Co.* v. *Waxed Products, Inc.*, 83 F.2d 75 (2d Cir. 1936);

34. *Enders Razor Co.* v. *Christy Co.*, 85 F.2d 195 (6th Cir. 1936);

35. *Kellogg* v. *Nabisco*, 305 U.S. 111 (1938);

36. *Grosjean* v. *Panther-Panco Rubber Co.*, 113 F.2d 252 (1st Cir. 1940);

37. *Riverbank Laboratories* v. *Hardwood Products Corp.*, 165 F. Supp. 747 (N.D. Ill.), *aff'd.*, 236 F.2d 255 (7th Cir. 1956);

38. *Tas-T-Nut Co.* v. *Variety Nut & Date Co.*, 136 F. Supp. 775 (E.D. Mich. 1956);

39. In re *Farmer Seed & Nursery Co.*, 137 U.S.P.Q. 231 (P.O.T.T.A.B. 1963);

II. CASES REFUSING TO APPLY *SINGER*

1. *Batcheller* v. *Thompson*, 93 Fed. 660 (2d Cir. 1899);

2. *Singer Mfg. Co.* v. *Hipple*, 109 Fed. 152 (E.D. Pa. 1901);

3. *Hughes* v. *Alfred H. Smith Co.*, 209 Fed. 37 (2d Cir. 1913);

4. *Searchlight Gas Co.* v. *Prest-O-Lite Co.*, 215 Fed. 692 (7th Cir. 1914);

5. *Prest-O-Lite* v. *Davis*, 215 Fed. 349 (6th Cir. 1914);

6. *Buffalo Specialty Co.* v. *Van Cleef*, 227 Fed. 391 (7th Cir. 1915);

7. *President Suspender Co.* v. *MacWilliam*, 238 Fed. 159 (2d Cir. 1916);

8. *Allen* v. *Walker & Gibson*, 235 Fed. 230 (N.D. N.Y. 1916);

9. *McIlhenny Co.* v. *Gaidry*, 253 Fed. 613 (5th Cir. 1918);

10. *Scandinavia Belting Co.* v. *Asbestos & Rubber Works of America, Inc.*, 257 Fed. 937 (2d Cir. 1919);

11. *McIlhenny* v. *Bulliard*, 265 Fed. 705 (D.C. La. 1920);

12. *Bayer Co.* v. *United Drug Co.*, 272 Fed. 505 (S.D. N.Y. 1921);

13. *McKesson & Robbins, Inc.* v. *Chas. H. Phillips Chemical Co.*, 23 F.2d 763 (D.C. Cir. 1927);

14. *Ironite Co.* v. *Guarantee Waterproofing Co.*, 52 F.2d 288 (W.D. Mo. 1931);

15. *Ironite Co.* v. *Cement Waterproofing & Ironite Co.*, 20 F. Supp. 603 (E.D. Pa. 1937);

16. *Timken Roller Bearing Co.* v. *Letterstone Sales Co.*, 27 F. Supp. 736 (N.D. Ill. 1939);

17. *Durable Toy & Novelty Corp.* v. *J. Chein & Co.*, 47 F. Supp. 167 (S.D. N.Y. 1942);

18. *Smith, Kline & French Laboratories* v. *Clark & Clark*, 62 F. Supp. 971, 1003 (D. N.J. 1945);

19. *Singer Mfg. Co.* v. *American Appliance Co.*, 86 F. Supp. 737 (N.D. Ohio 1949);

20. *Singer Mfg. Co.* v. *Redlich*, 109 F. Supp. 623 (S.D. Cal. 1952);

21. *Telechron, Inc.*, v. *Telicon Corp.*, 97 F. Supp. 131, 149 (D. Del. 1951), *aff'd.*, 198 F.2d 903 (3rd Cir. 1952);

22. *Singer Mfg. Co.* v. *Briley*, 207 F.2d 519 (5th Cir. 1953);

23. *Ross-Whitney Corp* v. *Smith, Kline & French Laboratories*, 207 F.2d 190 (9th Cir. 1953);

24. *Q-Tips, Inc.* v. *Johnson & Johnson*, 108 F. Supp. 845 (D. N.J. 1952), *aff'd.*, 206 F.2d 144 (3rd Cr. 1953);

25. *Medd* v. *Boyd Wagner, Inc.*, 132 F. Supp. 399 (N.D. Ohio 1955);

26. *Hazeltine Corp.* v. *United States*, 170 F. Supp. 615, 621 (Ct. Cl. 1959).

APPENDIX D

STATUTES INVOLVED

Title 15, United States Code:

§ 1114. Remedies; infringement; innocent infringement by printers and publishers

(1) Any person who shall, without the consent of the registrant—

(a) use in commerce any reproduction, counterfeit, copy, or colorable imitation of a registered mark in connection with the sale, offering for sale, distribution, or advertising of any goods or services on or in connection with which such use is likely to cause confusion, or to cause mistake, or to deceive; or

(b) reproduce, counterfeit, copy, or colorably imitate a registered mark and apply such reproduction, counterfeit, copy, or colorable imitation to labels, signs, prints, packages, wrappers, receptacles or advertisements intended to be used in commerce upon or in connection with the sale, offering for sale, distribution, or advertising of goods or services on or in connection with which such use is likely to cause confusion, or to cause mistake, or to deceive.

shall be liable in a civil action by the registrant for the remedies hereinafter provided. Under subsection (b) of this section, the registrant shall not be entitled to recover profits or damages unless the acts have been committed with knowledge that such imitation is intended to be used to cause confusion, or to cause mistake, or to deceive.

APPENDIX D (cont'd)

§ 1115. Same; registration on principal register as evidence of exclusive right to use mark; defenses

(a) Any registration issued under the Act of March 3, 1881, or the Act of February 20, 1905, or of a mark registered on the principal register provided by this chapter and owned by a party to an action shall be admissible in evidence and shall be prima facie evidence of registrant's exclusive right to use the registered mark in commerce on the goods or services specified in the registration subject to any conditions or limitations stated therein, but shall not preclude an opposing party from proving any legal or equitable defense or defect which might have been asserted if such mark had not been registered.

§ 1125. False designations of origin and false descriptions forbidden

(a) Any person who shall affix, apply, or annex, or use in connection with any goods or services, or any container or containers for goods, a false designation of origin, or any false description or representation, including words or other symbols tending falsely to describe or represent the same, and shall cause such goods or services to enter into commerce, and any person who shall with knowledge of the falsity of such designation of origin or description or representation cause or procure the same to be transported or used in commerce or deliver the same to any carrier to be transported or used, shall be liable to a civil action by any person doing business in the locality falsely indicated as that of origin or in the region in which said locality is situated, or by any person who believes that he is or is likely to be damaged by the use of any such false description or representation.